R01-16-C-030

TOWN OF MERRIMAC
OFFICE OF THE BOARD OF SELECTMEN
2-8 School Street, Merrimac, MA 01860
TEL (978) 346-8862 FAX (978) 346-7832
E-MAIL Selectmen@townofmerrimac.com

December 14, 2015

Frank Gardner
US EPA Regional Office
5 Post Office Square
Suite 100, MAIL CODE OSRR7-2
Boston, MA 02109-3912

RE: Environmental Protection Agency Brownfields Clean Up Grant Application

Dear Mrs. Cromwell:

The Town of Merrimac is pleased to submit its application for a Brownfields Cleanup Grant through the United States Environmental Protection Agency (EPA). The Town of Merrimac owns the property located at 2 Littles Court, which is made up of four (4) different parcels. The Town will be requesting funding for three of the four parcels. In this application, the Town is requesting $200,000 for parcel ID #3-1-20.

The Town of Merrimac is a small community located in the Commonwealth of Massachusetts with a population of 6,338. The Town is located within the Merrimack Valley in the state's northernmost corner. This abandoned Brownfields site was recently acquired by the Town due to the delinquency of the prior owner's property taxes and growing concerns over safety and environmental contamination from local residents. The site is located adjacent to the Town's downtown and is surrounded by residential dwellings.

The site, which is known as the Coastal Metals Finishing property was most recently used as a metal plating facility, from 1952 until it was abandoned in 2002. The site is approximately 1.59 acres in size and was occupied by a carriage manufacturing factory and a brass foundry prior to 1952. In 2003, the building was no longer being maintained and emergency response contractors were brought in to remove thousands of pounds of hazardous waste. Subsequent soil and groundwater investigations have indicated that the site contamination consists primarily of heavy metals in soil and groundwater and chlorinated solvents in groundwater.

The following is a listing of details concerning the site and the application:

Applicant Identification:	Town of Merrimac 4 School Street, Merrimac, MA 01860
Applicant DUNS number:	011786758
Funding Request:	$200,000 in grant funds for cleanup of hazardous substances
Location:	Town of Merrimac, Essex County, Massachusetts
Property Information:	Coastal Metals (Parcel 3-1-20) 2 Littles Court, Merrimac, MA 01860

Project Director:	Carol McLeod, Finance Director, Town of Merrimac, 4 School Street, Merrimac, Massachusetts, 01860, Phone: (978) 346-0524 , e-mail: cmcleod@townofmerrimac.com.
Chief Elected Official:	Harold Lloyd, Chairman, Board of Selectmen Town of Merrimac, 4 School Street, Merrimac, Massachusetts, 01860, Phone (978) 346-9755, e-mail: selectmen@townofmerrimac.com
Submittal Date:	December 18, 2015
Project Period:	The project will be completed within three (3) years from the awarding of the grant.
Population:	The population in the Town of Merrimac is 6,338 persons.

This is a very important project for the Town of Merrimac. The Town has been working diligently to assess the issues at this Brownfields site and is eager to begin the site cleanup in order to alleviate the hardships this property has placed on the residents of the Town.

I appreciate your consideration and support of this application and look forward to working with the EPA on this vital project in the Town of Merrimac.

Sincerely,

Harold Lloyd
Chairman, Board of Selectmen

Appendix 3
Cleanup Other Factors Checklist

Name of Applicant: Town of Merrimac, MA

Please identify (with an ***x***) which, if any of the below items apply to your community or your project as described in your proposal. To be considered for an Other Factor, you must include the page number where each applicable factor is discussed in your proposal. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal or in any other attachments, it will not be considered during the selection process.

Other Factor	**Page #**
None of the Other Factors are applicable.	
Community population is 10,000 or less.	**1**
Applicant is, or will assist, a federally recognized Indian tribe or United States territory.	
Targeted brownfield sites are impacted by mine-scarred land.	
Applicant demonstrates firm leveraging commitments for facilitating brownfield project completion by identifying amounts and contributors of funding in the proposal and have included documentation.	
Recent (2008 or later) significant economic disruption has occurred within community, resulting in a significant percentage loss of community jobs and tax base.	4 -5
Applicant is one of the 24 recipients, or a core partner/implementation strategy party, of a "manufacturing community" designation provided by the Economic Development Administration (EDA) under the Investing in Manufacturing Communities Partnership (IMCP). To be considered, **applicants must clearly demonstrate in the proposal the nexus between their IMCP designation and the Brownfield activities. Additionally, applicants must attach documentation** which demonstrate either designation as one of the 24 recipients, or relevant pages from a recipient's IMCP proposal which lists/describes the core partners and implementation strategy parties.	
Applicant is a recipient or a core partner of HUD-DOT-EPA Partnership for Sustainable Communities (PSC) grant funding or technical assistance that is directly tied to the proposed Brownfields project, and can demonstrate that funding from a PSC grant/technical assistance has or will benefit the project area. Examples of PSC grant or technical assistance include a HUD Regional Planning or Challenge grant, DOT Transportation Investment Generating Economic Recovery (TIGER), or EPA Smart Growth Implementation or Building Blocks Assistance, etc. To be considered, **applicant must attach documentation.**	
Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant.	

RANKING CRITERIA FOR CLEANUP GRANTS

1. Community Need

a. Targeted Community and Brownfields

Targeted Community – The Town of Merrimac, Massachusetts is a small community with a population of 6,338. The Town is located within the Merrimack Valley in the state's northernmost corner. Merrimac is bounded by Amesbury on the east, Haverhill on the west, the Merrimack River to the south and the New Hampshire border to the North. The Town is 8.6 square miles in size and includes Merrimack Square at its center, the north bank of the Merrimack River, more than 900 acres of farmland, I-495 as an access point, and many residential subdivisions scattered throughout the Town. Merrimac has a rural, small town feel that resonates with its residents.

Merrimac was incorporated in 1876 (previously West Amesbury), taking shape as a typical New England Town, with denser development around the Town Square and family farmsteads beyond. While the surrounding Merrimack Valley boomed as the heart of America's Industrial Revolution, Merrimac Square was a classic example of a 19th century industrial village, with carriage shops and other industries supporting residents from the surrounding countryside and the dense industrial cities nearby. As Merrimac progressed through the 20th century, Merrimac Square continued to fill in with residential development, often in very close proximity to the remnants of carriage shops and other cottage industries now being replaced by the inventions of the machine age. Zoning was introduced, but industrial buildings remained in the midst of residential neighborhoods. Some of these industrial spaces would remain vacant or underutilized or be replaced by the area's growing appetite for housing. Others were filled with new industries built to support post-war America's swelling demand for progress – tools, parts, piecework, circuit boards.

Such refinement in production required new technologies. Chemistry was the great promise of the new industrial age. New industrial chemicals were created to bind desirable compounds together, and new dangerous waste products were produced, preceding our collective understanding of proper waste management practices and effective government policy, often with significant consequences for the surrounding neighborhoods. What was viewed as progress in the mid-century was increasingly understood to have poisoned our soil, groundwater, and streams for generations coming of age at the close of the century.

The former Coastal Metals property is located adjacent to Merrimac Square, at the end of a small, narrow dead end street (Littles Court), in the heart of Merrimac's downtown. The Littles Court neighborhood, which surrounds the Coastal Metals site, consists of approximately 69 units of housing, both single family and multi-family. The majority of the housing on Littles Court is rental. In those 69 units, there are 43 residents which are elderly (55 or older) and 41 residents which are children (18 or under).

Demographic Information

	Targeted Community (Town of Merrimac)	City/Town or County (Essex County)	Statewide (Massachusetts)	National
Population	6,338[1]	746,159[1]	6,547,629[1]	308,745,538[1]
Unemployment	5.5%[2]	7.3%[2]	7.2%[2]	7.2%[2]

Poverty Rate	4.3%[3]	11%[3]	7.6%[3]	15.1%[3]
Percent Minority	3%[1]	18.1%[1]	19.6%[1]	26.7%[1]
Median Household Income	$76,936[3]	$66,918[3]	$65,981[3]	$49,445[3]
Other				
[1] Data is from the 2010 US Census data (Merrimac is Census Tract 2621) [2] Data is from the Bureau of Labor Statistics [3] Data is from the 2010 American Community Survey				

Brownfields – The former Coastal Metals site is the quintessential example of a small town's struggles with the legacy of post-war industrialization. In the early 1950s, this former metals plating facility took up shop on an approximate 1.59-acre site (composed of multiple parcels; the subject of this Cleanup Grant application is the central parcel 3-1-20) of an old carriage factory-cum- brass foundry that was located on Littles Court, in the center of a dense residential area just off Town Square. The site was used as a precious metal plating, zinc plating, and chromate plating facility. In 1970, Coastal Metals Finishing, Inc took over the site and grew the plating operations to include electroplating of printed circuit boards. Metals were fused to parts through chemical processes in highly acidic and/or caustic solutions, and parts were cleaned in heavy industrial solvents. The trajectory of Coastal Metals followed the rise and fall of such businesses across our region, eventually losing out to economic forces of an increasingly global marketplace. In 2002, Coastal Metals shuttered its doors, abandoning not only a crumbling building but also thousands of pounds of dangerous and hazardous chemicals.

The neighborhood around Coastal Metals was poorly setup to accommodate such a facility, a vestige of Merrimac's former industrial village scape. Littles Court itself is barely a roadway by modern standards, providing little more than a 20-foot gap between the homes along Main Street. The **surrounding homes are as close as 35 feet from the main site building**, which housed tremendous amounts of toxic chemicals and cleaning solvents.

In 2003 local residents were growing concerned about the rapidly deteriorating condition of the Coastal Metals property. As Merrimac is a small community, the Coastal Metals property is the primary brownfields site, if not the only brownfields site in the Town. The site building was unmaintained and unheated by its owner. When the Merrimac Fire Department and EPA inspected the facility that spring, they found conditions inside confirmed all of the neighbors' fears. Dozens of plating baths, containing thousands of gallons of extremely acidic or caustic liquids stood unattended, likewise solid cyanide and drums of waste debris.

EPA conducted an emergency response removal action at the abandoned Coastal Metals Facility from March to August 2003 and issued an After Action Report in October 2003. The report tells the story of abject mishandling of the closure of the facility – holes in the roof where rain could get in, potentially overtopping the plating baths only to collect into trenches in the middle of the floor. Inspection of the trenches showed they were constructed without bottoms, providing a direct conduit for contamination to enter the environment.

It became clear that the prior owner of the property would not be involved in any improvements of conditions at Coastal Metals. The Town engaged the Merrimack Valley Planning Commission (MVPC) for environmental assessments through their EPA Brownfields program. In 2007, MVPC's environmental contractor, TRC completed an American Society of Testing and Materials (ASTM) Phase I Environmental Site Assessment. A Phase II Environmental Site Assessment followed in 2010

through the combined resources of MVPC and MassDevelopment. The Phase II included sampling of site soil and groundwater, a hazardous building materials survey, and a subsurface geophysical survey that included ground-penetrating radar and seismic refraction technologies. In 2011, MassDevelopment funded decommissioning of a 10,000 gallon fuel oil underground storage tank (UST) at the site, and, earlier this year, MVPC completed a Phase II Comprehensive Site Assessment to evaluate potential human health risk and potential cleanup alternatives and to bring the site into compliance with Massachusetts environmental regulations.

The various environmental evaluations completed reveal conditions consistent with past use and poor stewardship. The soil is contaminated with arsenic, cadmium, lead, nickel, and zinc at concentrations exceeding Massachusetts cleanup criteria. Groundwater contains concentrations of chlorinated solvents and cyanide exceeding state standards, in addition to the metals also found in soil. Groundwater contaminant plumes are shown to have migrated off site, toward adjacent homes, concerning Town officials over potential vapor intrusion, exposing residents to volatile contaminants like trichloroethylene and tetrachloroethylene in indoor air.

Meanwhile the building continues to crumble. The roof is very near cave-in, with multiple large openings, and several of the exterior block walls are showing signs of collapse. It is a terrible eyesore, diminishing property values for the adjacent homes and holding down rental prices for the neighborhood tenants. This has created a disincentive for improvements to these properties. But more than just eyesore effects, **Coastal Metals is unsafe**. Although the site is fenced, and the Town tries to restrict access, there are many signs of trespass and uncontrolled dumping of trash and debris, and raccoons have infested the premises.

Cumulative Environmental Issues – Aside from the Town's Brownfields, we have several other challenges impairing the environmental quality of Merrimac. There are two large municipal waste combustion operations less than 10 miles upwind (and up-valley) from our Town in North Andover and Haverhill. Each facility has two combustion units with the capacity to 1,500 tons per day or more. The result to Merrimac is our air, soil, and water bodies contaminated with mercury, lead, cadmium, particulate material, and dioxins.

As an older Town, Merrimac has many old homes, which are key to the charm and appeal of our Town; however, the old housing stock exposes our residents, particularly our children, to hazardous compounds like lead based paint and asbestos, which add to the cumulative risk caused by contaminated brownfields

Merrimac also has an old municipal solid waste landfill that was closed and capped in 1999; however, the landfill is unlined and the cap that was installed may not be sufficient to mitigate leaching or the migration of landfill gas. The landfill is located within 500 feet of Cobbler Brook, the largest stream in Merrimac. The Town has been conducting landfill assessments to determine the impact of the landfill on groundwater, surface water, and air quality and is continuing in these efforts.

b. Impacts on Targeted Community

The proximity of the residences surrounding Coastal Metals – many mere steps from the site – and the approximately 41 children who live in homes adjacent the site exacerbate the impacts of the property on the community. Soil and groundwater contamination from Coastal Metals has the potential to cause significant adverse health effects. The primary hazardous exposure concern for residents in the vicinity of the Coastal Metals property is the inhalation of chlorinated-solvent vapors. Many chlorinated

solvents are known or suspected carcinogens with the potential to cause birth defects and developmental effects in children. In the case of trichloroethylene, the primary contaminant of concern, adverse developmental effects can occur after only a very brief period of exposure (i.e., days to weeks).

As the unmaintained paved surfaces at Coastal Metals continue to deteriorate, the risk increases of exposure to the underlying contaminated soil. Concentrations of arsenic identified just below the asphalt parking lot significantly exceed the imminent hazard threshold established by MassDEP. Concentrations of antimony, cadmium, copper, lead, nickel and zinc all indicate potential health effects. These metals may adversely impact the brain, endocrine system, kidneys, gastrointestinal system, immune system, and normal child development, after even short-term exposure. In addition, metals-containing dust released from the soil and transported to nearby residences may cause adverse respiratory effects.

The age of the homes that so closely surround the site (early 1900s or before) increases their potential susceptibility to the chlorinated solvent vapors intruding from contaminated groundwater, as many are constructed with stone foundations and earthen floor basements. Mitigation of the indoor air pathway for vapor migration would provide significant protection to the quality of the air in these homes. Reducing metals concentrations in soil found on site would enable the property to be redeveloped safely, without concerns over exposure of future inhabitants or users (particularly children) to toxic concentrations of metals.

Furthermore, the Coastal Metals site in its current condition is a safety hazard to residents. The building stands as a curiosity to neighborhood children, some of whom may already be trespassing on site. Removal of the site building to facilitate redevelopment will alleviate parents' concerns surrounding the impending collapse of the structure.

c. Financial Need

i.) Economic Conditions

Merrimac is a small rural town that lacks the access to resources that larger communities enjoy. The Town has limited industry, thus it relies on a residential tax base in order to meet its needs. In a State where taxes cannot be raised more than 2.5% each year, this restricts the Town's ability to meet its needs with property taxes, one of the only options for a Town this size in this sluggish economy. The current tax rate in the Town for FY 2015 is $16.16 per $1,000 of valuation. Because the Town is made up of mostly residential property, this tax rate barely creates enough funding for the Town to provide adequate services to its residents.

As with many communities throughout the Commonwealth of Massachusetts, the Town of Merrimac has seen a decrease in its State funding over the past several years because of the declining economy. In 2009, the Town received $906,225 in funding while in 2015, the Town received only $775,637. With this decrease, the Town must work diligently to ensure that it continues to provide necessary services and to meet the needs of its residents.

The above funding restrictions make it more difficult for the Town to manage the environmental liabilities inherited with the Coastal Metals Site. The Town only took the property for non-payment of taxes when it became obvious that the previous owner would not work to improve the condition of the site and surrounding area. Receiving this grant would provide critical gap funding for the Town.

Recently, the Town lost two private educational facilities, the Littles People Preschool and Harbor Schools, a school for troubled teens. The closing of both these facilities has resulted in a loss of jobs in the Town. For a Town with such limited industry, any loss of jobs can have a dramatic effect.

Not only has there been a loss of industry in the Town, but in the Merrimack Valley as well. Because the Town of Merrimac is for the most part a bedroom community, the loss of industry in surrounding communities, such as the City of Haverhill, has an effect on the economic conditions in the Town. According to the Merrimack Valley Workforce Investment Board, from 2011 to 2013 their career centers have assisted approximately 15,000 individuals per year. In the past 10 years, the surrounding area was hit hard by the closing of Lucent Technologies which laid off over 10,000 employees over a 4 year span. More recently, the abutting City of Haverhill saw the loss of over 170 employees with the close of the Haverhill Paperboard Corporation in 2008. Even though these losses of jobs did not occur specifically in the Town of Merrimac, their impact is still felt in the community.

The Town saw a major change in the 1960's with the construction of I-495. As like most small rural towns at the time, the construction of highway access changed the ways towns developed dramatically. For Merrimac, however, regional transportation improvements meant not only its discovery by a new generation of homebuyers but more significantly, I-495 severed the entire southern end of Merrimac from the rest of town, leaving intact only a few of the old roads that once led seamlessly from New Hampshire south to the Merrimack River. I-495 cuts this portion of the Town off from Merrimac's downtown area, leaving those residents separated from the downtown retail options, thus creating a negative impact on the economy of Merrimac.

In both 2006 and 2010, the Town received funding from FEMA and MEMA for the devastation created by the flooding associated with two major storms. The storm in 2006 resulted in major flooding of Cobblers Brook and several roads in the community. The Town received almost $200,000 to mitigate the effects of that storm. In 2010, the Town received almost $30,000 in funding to mitigate the damages, including roof, roadway, and sewer damage resulting from a major storm.

Finally, with the cleanup of this property, the Town expects to develop the parcel into affordable housing. Approximately 5.8% of the Town of Merrimac's housing stock is affordable, thus showing that the Town has a great need for additional affordable housing. The Housing Production Plan illustrates the Town's need for additional affordable housing to meet the needs of its residents. This additional housing option for the residents of the Town will assist in addressing the Town's lack of affordable housing.

ii.) Economic Effects of Brownfields

The Coastal Metals site is surrounded by residential properties. Since the owner's abandonment of the property in 2002, the Town is seeing the economic impact of this Brownfields site in the depressed property values of the abutting residential properties. The single family homes abutting the site are valued at approximately half that of the average assessed value of the single family homes throughout town, while the multi-family homes abutting the site are valued at approximately 1/3 of the average assessed value of the multi-family homes throughout town. According to the Town's Board of Assessors, the properties surrounding the Coastal Metals site are either not selling; are selling at lower prices than similar properties in other parts of town or are staying on the market for longer periods of time, even at reduced prices because of the contamination associated with the site, the unattractiveness of the abandoned building and the safety concerns overall. It is expected that the blight of the Coastal

Metals site has brought down the property values of these properties and have made them difficult to sell.

The building located at the site is in extreme disrepair and the residents have continued to express their concern about the safety of the structure. EPA noted holes in the roof in their 2003 After Action Report. In the ten years from the issuance of that report until the Town took the property, no work was done by the building's owner, and conditions declined even further. The building, which has been condemned for several years, is now home only to raccoons and growing piles of trash. The Town is concerned about the hazards associated with a dilapidated building and its proximity to the adjacent residences. In addition, the issues with the building have continued to diminish property values for the adjacent homes and hold down rental prices for the multifamily homes along Main Street. This has created a disincentive for improvements to these properties.

The Town of Merrimac is a small town with a limited staff to achieve the day to day governmental functions. In August 2013, the Land Court issued a final determination, granting the property to the Town for non-payment of back taxes. Once the Town took ownership through the tax title process, the maintenance issues at the site became the responsibility of the Town. The Town has spent $240,000 on assessment of the contamination of the site and $7,000 to provide a safe site. This is a total of $247,000 already spent by the Town on the Coastal Metals site. Because of the hazards associated with the safety of the building and the fence that has been located around the site, the Town must expend municipal staff to ensure the safety of the neighborhood. The current status of the site is creating a burden on municipal services.

2. Project Description and Feasibility of Success

a. Project Description

i.) Existing Conditions

The Coastal Metals property occupies approximately 1.59 acres over four parcels in the center of a dense residential neighborhood. There is one building that sits on three of the four parcels that is an agglomeration of multiple additions made over the years since the 1920s. The subject of this Cleanup Grant application is the easternmost parcel (Town of Merrimac Assessor ID 3-1-20). Parcel 3-1-20 is an approximately 0.51-acre irregularly shaped parcel that contains the portion of the site building that contained the electroplating chemical storage area, plating vats, the water treatment system, and the precious metals plating area.

Several environmental investigations that have been completed on the site have indicated that Coastal Metals is a mess above and below the surface. The building is the definition of dilapidated. Large sections of the roof are missing and portions of the structure are showing signs of potential immediate collapse. The current condition of the building renders it useless for reuse. Soils contaminated by heavy metals have been identified at multiple locations across the site. Groundwater beneath the site building is contaminated with metals, cyanide, and chlorinated solvents and has migrated onto nearby parcels east of the site. Groundwater concentrations of chlorinated solvents indicate significant potential for these contaminants to volatilize out of groundwater into pore spaces in overlying soil, then for intrusion of contaminated vapors into indoor air on site and in adjacent homes.

The site is vacant, and is not safe for any use in its current condition. There are indications that trespassers are gaining access to the building, including bags of trash and piles of debris that has been illegally disposed on site. The trash and debris serve as habitat and sustenance for the raccoons that have infested the property. The Town, with the assistance of the Board of Health, is working diligently

to control the trespassing on the site. Fortunately, Town officials took proper steps to intervene between a derelict property owner and rightly concerned neighbors. In August 2013, the Land Court issued a final determination, granting the property to the Town for non-payment of back taxes.

Merrimac currently has a significant paucity of affordable housing. Approximately 5.8% of the Town of Merrimac's housing stock is affordable, which is not sufficient to meet the needs of the Town's residents. Both the Town and the adjacent residents have expressed that an affordable housing project at this location would not only be appropriate, but welcomed. To this end, the Town has been working with several developers who are interested in developing this property into affordable housing once the cleanup has been completed. In partnership with those discussions, the Town released a Request for Interest (RFI) in September, 2015. This RFI allows for developers to express their interest in developing the property and provide the Town with conceptual drawings for that development. The Town received a proposal from a developer interested in developing the site into affordable housing and the Town is currently working with that developer as it creates a formal Request for Proposals (RFP) to dispose of the site.

Redevelopment of the Coastal Metals site into multi-family affordable housing will dovetail neatly with on-going projects and initiatives in the Town. In 2014, the Town began a large project to overhaul Merrimac Town Square. New traffic patterns, drainage, water mains, streetscapes, and bicycle lanes will be the result of this effort. This is part of the Town's objective of increasing the vibrancy and attractiveness of their downtown area. Increased density within walking distance of the downtown will not only boost the vitality of the area, but will help the small businesses in the area to thrive and improve the economy.

ii.) Proposed Cleanup Plan

The Town will procure an environmental consultant and Massachusetts certified Licensed Site Professional (LSP) to oversee all response actions on site. Cleanup of the Coastal Metals property will involve: demolition of the site building; removal of metals contaminated soils; and completion of an Activity and Use Limitation (AUL) on the property. The Town will procure a properly licensed hazardous building materials (e.g., asbestos, lead-based paint, PCBs) abatement contractor to remove all hazardous building materials prior to demolition. Following demolition the debris and building materials will be properly recycled or disposed, consistent with all regulations. Building abatement and demolition will be conducted in accordance with detailed specifications prepared with the Town's environmental consultant. Metals contaminated soils will be removed from targeted areas on site to a depth of three feet. During excavations, soils will be managed in an appropriate manner to minimize dust and be protective of human health. Contaminated soils will be properly transported off site for reuse, recycling, or disposal at a certified waste facility and consistent with all state and federal laws. The removal of these soils is required in order to accommodate the Town's targeted reuse (multi-family residential). ***Much of the soil that must be removed from the site is located beneath the site building, so demolition of the site building must precede any response actions in order to accommodate proper remediation of the property.*** An activity and use limitation (AUL) may be required on site in order to mitigate future exposures to residual concentrations in site soils (beneath three feet) and groundwater. The AUL would identify allowable future uses of the property; property soil management procedures; and building construction requirements to mitigate the potential for encroachment of vapors into future site buildings. One such requirement will be that future buildings on site be constructed with a subslab depressurization system or similar means of mitigating potential future encroachment of airborne contaminants via vapor intrusion. The response actions and AUL will be designed to accommodate the Town's desired reuse of the property as multi-family housing. The

Town's LSP will be responsible for ensuring that all cleanup activities are conducted in accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000).

b. Task Description and Budget Table

Task Description

The Coastal Metals Brownfields Hazardous Assessment project consists of the following tasks to be covered in part by the Hazardous Substance Cleanup Grant:

Task I: Cooperative Agreement Oversight / Engineering: Includes costs for the planning, engineering, design, bidding, and oversight of cleanup activities. This budget allocates all costs to contractual items to complete the cleanup activities of the site and is further broken down as follows:

1. $6,000 for planning, engineering, design, and bidding (60 hours at $100 per hour)
2. $4,500 for waste characterization and disposal facility coordination (2 disposal criteria samples at $600 plus 15 hours at $100 per hour; $1,800 for one day of drilling for pre-characterization)
3. $6,000 for on-site oversight and documentation (60 hours at $100 per hour)

It is estimated that the Town will provide grant management oversight, contractor coordination, and review of bid documents, preparation of final bid specifications package, and procurement of remediation contractor as an in-kind service at an estimated amount of $4,900 (48 hours at $70 per hour). Outputs for this include EPA Quarterly reports, quarterly ACRES updates, engineering bidding documents, and cleanup oversight field reports.

Task II: Public Meetings and Community Involvement: Includes development of a Community Relations Plan and preparing and advertising an Analysis of Brownfields Cleanup Alternatives / Remedial Action Plan (ABCA/RAP), and submitting a Release Abatement Measure (RAM) Plan to MassDEP. In addition, this task involves the public involvement activities described in Section 3.a. This task estimates the following:

1. $1,050 for Town personnel to advertise and attend public meetings (15 hours at $70 per hour)
2. $4,500 for consultant time to prepare the ABCA/RAP and RAM Plan documents, assist in the community outreach portion, and participate at the public meetings (45 hours at $100/hour)
3. $450 in supplies that will comprise newspaper advertising and presentation materials

The Town will provide additional coordination and community outreach support outside of the public meetings as an in-kind service at an estimated amount of $1,680 (24 hours at $70 per hour). Activities will include information and data distribution to neighbors directly impacted by the project and negotiation of site access agreements, as required. Outputs for this task include the Community Relations Plan, ABCA/RAP, RAM Plan, Signed access agreements, data results letters, handouts during public meetings, and meeting minutes documenting the results of the meetings.

Task III: Cleanup Activities: This task includes contractor costs for abatement, demolition, confirmation sampling, and removal of soil, asphalt, and concrete. This budget allocates all costs to contractual items to complete remediation activities at the Site and is further broken down as follows:

1. Approximately $16,500 for hazardous building materials abatement (based on 2010 building survey and cost estimate, increased to account for market changes).
2. Approximately $74,000 for building demolition (estimated, based on verbal estimates provided by demolition contractor).
3. Approximately $76,000 for contaminated soil, asphalt, and concrete removal, transportation and disposal (T&D), and backfill (based on a disposal contractor estimate for removal and T&D of 275 cubic yards of soil [95% non-hazardous at $40/ton, 5% hazardous at $250/ton], 275 cubic yards of backfill [$20/ton], removal and T&D of asphalt and concrete, confirmation sampling, backfill characterization sampling).

The Town of Merrimac will provide a cost share of $33,300 toward the above tasks, which will be sourced through in-kind services provided and, when necessary, with cash contributions from the Merrimac capital fund. Possible in-kind services include providing clean backfill (estimated at $20 per ton) from other concurrent Town improvement projects, equipment and/or labor during building demolition/cleanup, police detail and traffic management during soil loading and transportation, and water for dust suppression during soil excavation and loading. Outputs for this task will include engineering oversight field reports that will be submitted to the MassDEP, and bills of lading and/or waste manifests.

Task IV: Coordination and Final Reporting: Includes consultant costs for ongoing coordination with the EPA Brownfields Program and the MassDEP under the Voluntary Response Action Program. Subtasks will include communications, submission of status reports, and a remediation summary report.

This task estimates $8,000 for consultant time for preparing the Permanent Solution Statement and Activity and Use Limitation (80 hours at $100 per hour), and $3,000 for the services of a Professionally Licensed Surveyor (PLS) to provide an updated site survey and file the AUL.

The Town will provide coordination and communications with the EPA and DEP (including the grant closeout report) as an in-kind service at an estimated amount of $1,960 (28 hours at $70 per hour). Outputs include the grant closeout report, Permanent or Temporary Solution Statement, and AUL.

A proposed budget for this Brownfields Hazardous Substances Cleanup Grant is presented below. **Please note** that the total budget, as determined through the review of completed assessment work and the results of the Draft Analysis of Brownfields Cleanup Alternatives (Attachment 6) exceeds the amount available under the grant. All of the project tasks are eligible for Brownfields funding. Therefore, the portions of the project budget which exceed the value of the Brownfields Cleanup Grant will be funded through leveraged resources as described further in Section 2.c.

Coastal Metals Brownfields Hazardous Substance Cleanup Budget					
Budget Categories	*1. Cooperative Agreement Oversight & Engineering*	*2. Public Meetings and Community Involvement*	*3. Cleanup Activities*	*4. Coordination and Reporting*	*Total*
Personnel	$0	$1,050	$0	$0	$1,050
Travel	$0	$0	$0	$0	$0
Equipment	$0	$0	$0	$0	$0
Supplies	$0	$450	$0	$0	$450
Contractual	$16,500	$4,500	$166,500	$11,000	$198,500
Other	$0	$0	$0	$0	$0
Total	$16,500	$6,000	$166,500	$11,000	$200,000
Cost Share	$4,900	$1,680	$31,460	$1,960	$40,000

c. Ability to Leverage

Should the value of our proposed EPA Cleanup Grant and the in-kind services not be sufficient to demolish the building and complete the cleanup activities at the site, the Town of Merrimac will look to other funding sources to assist in the project's completion. If continuing environmental monitoring obligations remain, additional public agencies will be approached for funding. The Merrimack Valley Planning Commission(MVPC) has committed over $180,000 in evaluating environmental conditions on site, and MassDevelopment has provided approximately $53,000 in funds for this project thus far. In their continued support of the project, MassDevelopment is in the process of awarding the Town $10,840 to assess environmental conditions in the structure while MVPC has expressed their continued interest in seeing this site be cleaned and redeveloped. There are letters of commitment expressing continued support from both these agencies included in this application. An additional source of assessment funds available to the Town is MassDEP's Site Assessment and Remediation Support Services (SARSS) program. Merrimack Valley Planning Commission's Brownfields Cleanup Revolving Loan Fund (RLF) is an option for additional cleanup costs, should they be exceeded.

Following the cleanup of the parcel, the Town will be looking to the following entities to assist in the redevelopment of the site:

North Shore Community Development Corporation and Joncas Associates – Potential Developers: These are two developers interested in developing affordable housing at the site. The Town has been in discussions with both developers and both have expressed that they would be interested in developing the site once an RFP is advertised to develop the site.

Merrimac Savings Bank and Haverhill Bank – Potential Development Loans: Both banks are located within the Town of Merrimac and have a close relationship with the Town. Both have financially assisted the Town in projects in the past and have expressed interest in continuing their efforts. Merrimac Savings Bank is located adjacent to the Coastal Metals site and has expressed their interest in seeing the property be cleaned and redeveloped. There is a support letter from Merrimac Savings Bank to that effect attached to this application. The Town will look to these institutions to assist in the redevelopment of the parcel, possibly through low interest development loans.

3. Community Engagement and Partnerships

a. Plan for Involving Targeted Community & Other Stakeholders; and, Communicating Project Progress

The surrounding residents are a close knit neighborhood that have come together in their efforts to ensure that the Coastal Metals property is cleaned up, the buildings demolished, and the site

redeveloped into affordable housing. In 2003 when local residents expressed their concern about the rapidly deteriorating condition of the Coastal Metals property, the Town responded with an inspection by the Town of Merrimac Fire Department and EPA. The Fire Department and the EPA found the conditions inside had confirmed all of the neighbors' fears. This began the Town's partnership with the neighborhood. Since that initial inspection, the neighbors have been informed at every stage of this project, including the development of the Phase I and the Phase II assessments, the removal of the underground storage tank on the property, and the Town's taking of the property resulting in the Town's ownership. Because of the close proximity of the neighbors, the cleanup activities and any further assessments will involve many of the adjacent properties and through that process; the Town is committed to working with the neighbors and addressing their concerns.

On December 7, 2015, the Town of Merrimac held a community meeting to discuss this application and the Draft ABCA for this grant application. Many neighborhood residents were in attendance and expressed their support for the cleanup and the redevelopment of the site into affordable housing.

During the course of this project, the Town of Merrimac will continue to engage the community, particularly the Little Court neighborhood, in discussions concerning the cleanup and the redevelopment of the site. When the grant is awarded, the Town's first step will be to hold a public meeting to discuss the project and particularly how it will affect the Little's Court neighborhood. In addition, the Town will go to each residence surrounding the site and provide each with a fact sheet concerning the cleanup up and what they can expect to occur at the site. During the construction at the site, the Town will place a standing agenda item on the Board of Selectmen's meeting agenda so that citizens of the Town will have ample opportunity to be updated on the progress at the site and express any concerns they may have. Furthermore, the Town has created an e-mail list containing each Littles Court resident. The Town will utilize this list to provide information concerning the status of the project from initial cleanup to disposition of the parcel to the development of affordable housing. Once the site is cleaned, the Town will engage the public during the disposition of the parcel through meetings and e-mail updates. Once a developer is selected, the Town will host a meeting with the residents and the developer to ensure that the residents are informed throughout the project and have the opportunity to provide comments and suggestions to the developer. Throughout this process, the Town is committed to ensuring that all questions are answered and that the comments received are implemented into the plan for cleanup and redevelopment.

In order to seek out and address any concerns that the residents may have concerning health, safety, and community disruption, a representative from the Town's Board of Heath will attend the public meetings concerning cleanup for the project. In addition, each resident will be able to e-mail the Town and the Board of Health to state any concerns they may have during the project and the Town and the Board will be able to address their concerns in real time.

The objectives, live monitoring, and endpoints of the cleanup project will be evaluated by a human health risk assessor at every point in the project. Action levels and remediation objectives for the project will all be risk-based and protective of the most sensitive potential receptors (e.g., children and expectant mothers) with regard to calculated potential toxicity and excess lifetime cancer risk. Should potential risks be identified, they will be managed primarily using engineering controls, such as soil wetting during excavation, to mitigate potential exposures to potentially harmful contaminants.

b. Partnerships with Government Agencies

Current and future response actions undertaken at the Coastal Metals site are conducted in accordance with the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). The site is tracked under Release Tracking Number (RTN) 3-27210. The MCP is a privatized system. MassDEP does not review work plans or determine if or when a site can be closed and is safe for redevelopment. The responsibility to ensure that all response actions are conducted in accordance with the MCP lies with the Licensed Site Professional. MassDEP can exercise some direct authority over a project and does conduct audits to ensure that response actions have been conducted correctly. Valerie Thompson is MassDEP's Site Manager for the Coastal Metals project. Due to the proximity of the houses surrounding Coastal Metals, Ms. Thompson keeps a close eye on the project.

In accordance with the MCP, the Board of Health will be notified in writing of all regulatory submittals (work plans, phase reports, etc.) prepared for the Site. In addition, the Town will continue to partner with MassDevelopment, the Merrimack Valley Planning Commission, and the EPA during site cleanup and redevelopment of the site. Finally, the Town will work closely with HUD and the Commonwealth's Department of Housing and Community Development as the site is developed into an affordable housing project.

c. Partnerships with Community Organizations

Working with community groups and local residents is at the heart of the Town's objective to remediate environmental contamination and achieve a mutually beneficial and sustainable reuse of the site. Residents of the neighborhood were the first to rally in support of cleaning up Coastal Metals. The Littles Court Neighborhood has been intimately involved throughout the securing of the site with fencing, the development of the Phase I and Phase II assessments and the removal of the underground storage tank. Turn outs at past meetings about the site have been very robust, and the Town has pledged to continue to work with the neighborhood throughout the remainder of the project. The group has expressed their support of the Town's likely redevelopment of the property as affordable housing.

The Town has a great need for additional affordable housing, as only 5.8% of the Town of Merrimac's housing stock is affordable. The redevelopment of this project to enhance those numbers has been championed by the Affordable Housing Board of Trustees and their Chairperson Sandy Venner. The Town has been working with the Board to discuss the options for redevelopment of the site and meet the goals and objectives of their Housing Productivity Plan. With that the Board has committed future funding to assist in the development of this site. The Town will continue to work with the Board to ensure that the redevelopment of the site meets the Town's affordable housing needs.

The Merrimack Valley Workforce Investment Board is committed to partnering with the Town to assist the residents in taking advantage of the Board's programs, including local job training.

The Public Library is committed to providing the Town with space as all of the public meetings proposed to be held during each phase of the project will be held at the Library.

There are letters of commitment from these organizations included in the Attachments section of this application.

4. Project Benefits

Cleanup and redevelopment of the Coastal Metals site will remove blight and environmental contamination, catalyze neighborhood revitalization, lessen development pressure on greenfields

around the fringes of Town, and use existing infrastructure. We expect that a resolved and improved property in the heart of our Town will enhance our efforts to energize downtown Merrimac.

a. Health and/or Welfare and Environment

i.) Health and/or Welfare Benefits

As with many Brownfields, the health benefits of cleaning up the Coastal Metals site would potentially have the most lasting effect of all the improvements that would result. The removal of soil contaminated with heavy metals from the site will result in reduced risk of harm to the brain, endocrine system, kidneys, gastrointestinal system, and immune system and will decrease the potential for impaired child development.

Demolition of the site building would greatly improve safety and give the neighbors peace of mind that vagrants aren't encroaching on their property. The Town and the Board of Health will continue its efforts to stop all trespassing on the site. Furthermore, the Town will continue to clean up any debris that has been deposited at the site as a result of the trespassing.

ii.) Environmental Benefits

Removal of contaminated soils on site would have a lasting environmental impact by improving soil quality so that contaminants can't bind to root systems and be taken up by plants, fruits, and vegetables. Further, the project will ease the potential for exposure of nearby residents, already taxed by elevated airborne metals and dioxins from area waste incinerators, to blowing dust contaminated by arsenic, lead, cadmium, and nickel.

b. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse

i.) Planning, Policies and Other Tools

Several steps will be taken by the Town in order to ensure that the cleanup and redevelopment on the site will have a lasting positive impact through ***sustainability principles***. These principles are at the heart of the Town's efforts to improve the ***livability*** or our town. The Town will green the cleanup of this property by having technically sound demolition and remediation specifications prepared which clearly state the measures to be taken by environmental contractors to maximize recycling of materials and debris from the project. Potential remediation contractors will be asked to submit examples of procedures and management practices that they use in order to minimize resource use and consumption and waste generation as part of their bid packages. There will be idling restrictions placed on cleanup contractors in order decrease the carbon footprint of heavy equipment during remediation efforts. Clean soils will be sourced locally, as outlined below, to decrease the consumption of fossil fuels.

The Town will manage the Request for Proposals (RFP) process for site redevelopment to achieve desired reuse and sustainability goals. Bidders will be asked to submit their responses to a number of sustainability criteria including energy efficiency, water use, stormwater management, green areas, and steps taken to tie the project to the redevelopment of Merrimac Square. The Town will evaluate potential developers based on their responses to these criteria as a key part in the selection of the most appropriate developer.

The redevelopment of the site into a residential development will create a new sustainable development for the Town of Merrimac. The new housing development will be located adjacent to the downtown and within walking distance to many of the Town's services. Furthermore, with the redevelopment of

the town center, which began construction in the Spring of 2014, the residents of this addition to the Littles Court neighborhood will be able enjoy a new bikepath and handicap accessible sidewalks.

ii.) Integrating Equitable Development or Livability Principles

The redevelopment of the Coastal Metals site will incorporate equitable development practices and livability principals. The Town has long been in discussions with community groups and developers about the reuse of the Coastal Metals Site for affordable housing. The Town's 2002 Master Plan recommends that multi-family uses adjacent to Merrimac Square be encouraged in order to enhance the livability of Merrimac by creating a vibrant community steps from our pedestrian- and bicycle-friendly downtown. The Town's 2010 Housing Production Plan also gives preference to affordable housing projects that are infill development and are adjacent to Town Center.

In the Spring of 2014 the Town began a project to reconstruct Merrimac Square, which is located adjacent to the Coastal Metals site. The project will consist of new water mains, complete reclamation of the existing roadways, new drainage, a parking lot, ADA compliant sidewalks, landscaping, a new improved roundabout, and a new bike path. Redevelopment of Merrimac Square will enhance the sustainability of our development objectives by providing a refreshed and invigorated town center that will draw increased commercial development just steps from the site, creating incentives for new residents of a redeveloped Coastal Metals to leave their cars behind. We intend to source clean soil material for backfill at the Coastal Metals site from our impending town square improvement project. Rather than being transported miles away to a landfill or batch plant, confirmed clean soils from the Merrimac Square project will be moved to the Coastal Metals site, less than 500 feet away. This beneficial reuse of soil resources saves significant fossil fuels both on the transportation and disposal of soils from the town square site and on the transportation of clean fill material to the site.

c. Economic and Community Benefits

i.) Economic or Other Benefits

The cleanup and redevelopment of the Coastal Metals site will have a great positive benefit on the economic vibrancy of Merrimac. The cleanup of this property will enhance the value of the adjacent homes, by removing the significant eyesore effects of Coastal Metals. The residential properties that surround the Coastal Metals site have a dilapidated structure right outside their windows, some as close as 35 feet to the building. With the demolition of the structure, the cleanup of the site, and the redevelopment of the site into housing; the Littles Court neighborhood will change dramatically. Where they once looked at a hazardous abandoned industrial property, they will now see an architecturally pleasing residential building. In addition, the redevelopment of the site will create much needed green space that will surround the proposed housing project, creating a much more environmentally pleasing area for the neighborhood.

The 4 parcels that make up the site are 1.59 acres of underutilized land in the heart of downtown Merrimac. This space would be better utilized by providing much needed affordable housing in the Town. The redevelopment of the site will not only remove the health risks associated with the site but will increase the tax base in the Town. Furthermore, because of the parcel's close proximity to downtown, the cleanup will benefit the economic development of the downtown in conjunction with the major improvement project in the Square. Many communities have seen the benefit of additional residents to the downtown and the effect that the residents have on economic development by increasing the vitality of the area while spurring additional growth and the Coastal Metals project will be no different. The Merrimac Square project will improve the vehicle transportation in the center of Town and will provide better transportation options in ADA compliant sidewalks and a new bikepath.

The new residents of the Coastal Metals site will enjoy these benefits while hopefully improving the economy of downtown Merrimac.

ii.) Job Creation Potential: Partnerships with Workforce Development Programs

This project will create several jobs from start to completion. Jobs will be created with the demolition and removal of the building on the site, through the cleanup phase of the project, and during the redevelopment phase of the project with the construction of the housing development. Additional jobs will be created once the project is complete in the management of the housing development. The town is committed to encouraging the hiring of local residents for these jobs.

With the creation of the affordable housing development, the new residents of the complex will add to the existing workforce in the town. The town is committed to partnering with the Merrimack Valley Workforce Investment Board to assist the residents in taking advantage of the Board's programs, including local job training.

5. Programmatic Capability and Past Performance

a. Programmatic Capability

The Town's Finance Director, Carol McLeod will be administering the Brownfield's Cleanup Grant if awarded by the EPA. The Finance Director has extensive experience in administering various grants in the Town, including the financial aspects, project management, and any reporting requirements deemed necessary by the grant. Furthermore, the Finance Director has overseen all aspects of this project thus far including both the Phase I and the Phase II assessments performed on this site and the underground storage tank removal.

Once the grant is awarded, Ms. McLeod will administer all aspects of the project. Furthermore, Ms. McLeod will meet all the reporting requirements of the grant. After the site is cleaned, Ms. McLeod will continue to oversee the project and the process of selecting a developer to purchase the parcel and develop an affordable housing project on the site.

b. Audit Findings

There have been no adverse audit findings for any previous grants that the Town of Merrimac has obtained.

c. Past Performance and Accomplishments

The Town has not received any EPA Brownfields grants in the past. Although, the Town has received funding from other sources in order to complete both the Phase I and Phase II assessments and to remove an underground storage tank on the parcel. The Town received $195,719 from the Merrimack Valley Planning Commission (the regional planning agency) and the Town received $47,225 from MassDevelopment (a public/private agency) in order to complete the assessment and work at the site thus far. The Phase I is complete, the underground storage tank has been removed, and the Phase II environmental site assessment is complete. Carol McLeod, the Finance Director with the Town, managed both the processes to complete the Phase I and II

The Town has received several other grants from either State or Federal Agency's for issues or projects within the Town. All of the grants have been managed effectively. The following are two major grants that the Town has received in the last 10 years:

- Senior Center: The Town received a federal grant through Community Development Block Grant (CDBG) in 1999 in the amount of $590,000 for the construction of a new Senior Center. The Town contributed approximately $524,605 in funds to complete the project. Furthermore, the Town fundraised and received several other smaller grants to furnish the building. The approximately $1.15 million construction project was completed and the Senior Center was opened in 2001. Laura Mailman, Director of the Senior Center and Frank Messer, Finance Director managed the grant for the Town. The grant required weekly meetings, public information sessions, quarterly reports, detailed invoicing.

- Construction of a New Library: The Town received approximately $1.67 million funding from the Massachusetts Board of Library Commissioners to construct a new library in the Town. In addition to the funds provided by the State, the Town bonded for $2.35 million for the remainder needed to complete the project. The new library was opened in 2004. Mark Hebonstreit, the Chair of the Building Committee and Don MacMillan, Library Director managed the grant. The grant required public meetings, quarterly reports, and detailed invoicing.

THRESHOLD CRITERIA

1. Applicant Eligibility

a. Eligible Entity: As an incorporated Town in the Commonwealth of Massachusetts, the Town of Merrimac is eligible to apply for this grant

b. Site Ownership: The Town of Merrimac is the sole owner of the site located at 2 Littles Court in Merrimac, Massachusetts. The site is made up of 4 separate parcels (Parcels: 3-1-7, 3-1-8, 3-1-20, 3-1-18A) and the Town owns all 4 parcels. The Town is requesting funding for Parcel ID #3-1-20.

2. Letter from the State or Tribal Environmental Authority

A letter of support from the Massachusetts Environmental Protection Agency is included as an attachment to this application.

3. Site Eligibility

a. Basic Site Information

- Name of Site: Coastal Metals
- Address of Site: 2 Littles Court, Merrimac, MA 01860
- Owner of the Site: Town of Merrimac

b. Status and History of Contamination at the Site

- Investigations conducted on site have indicated that the soil and groundwater are contaminated with heavy metals, cyanide, and chlorinated solvents.
- The site was previously used for a carriage manufacturing factory and a brass foundry in the early 20th century. Beginning in 1952, the site was used as a precious metal plating, zinc plating, and chromate plating facility. In 1970, Coastal Metals Finishing, Inc took over the site and operated a plating business on the property until 2002. Since 2002, the property has been abandoned and no other use has occupied the site.
- Identified concentrations of hazardous substances in the soil indicate toxicities that would be unsafe to future development of the property. Chlorinated solvents emanating from the site are migrating off site with the direction of groundwater flow. This contaminated groundwater plume has the potential to adversely impact the air quality of the many residences which sit in close proximity to the site.
- Plating operations at Coastal Metals involved the use and storage of thousands of pounds of acidic and caustic baths, metals- and cyanide-containing solids, and degreasing solutions containing chlorinated solvents. The site building at one time housed dozens of plating vats containing highly acidic or caustic solutions. Spills or releases of these contaminants would have flowed directly to trench drains in the floor directly next to many of the vats. Evaluations conducted at the site have indicated that these trench drains were constructed without solid bottoms, a direct conduit to the subsurface.

c. Sites Ineligible for Funding

The site is not listed or proposed for listing on the National Priorities List, it is not subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA and is not subject to the jurisdiction, custody, or control of the United States Government.

d. Sites Requiring a Property-Specific Determination

In 2003 EPA conducted an emergency response removal action at the abandoned Coastal Metals Facility after they were notified by the Merrimac Fire Department that the site building was no longer being maintained and significant quantities of hazardous chemicals were left on site. The removal action was conducted from March to August 2003, and EPA issued an After Action Report in October 2003. Since the removal action is complete and no longer in progress, a property-specific determination is not required. No other conditions potentially requiring a property specific determination are associated with the site.

e. Environmental Assessment Required for Cleanup Proposals

An American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment was completed for the Site in 2007 and a Phase II Environmental Site Assessment was conducted in 2010 as part of the Merrimac Valley Planning Commission's EPA Brownfields Assessment Program. In 2011 the Town decommissioned a 10,000 gallon fuel oil tank from the site using grant funds from MassDevelopment. An Interim Phase II Comprehensive Site Assessment was completed in May 2014 that further evaluates the nature and extent of contamination on site as well as the risks to human health and the environment posed by the contaminated media.

4. Property Ownership Eligibility

b. CERCLA §107 Liability

The Town is not liable for the contamination present at the Coastal Metals site under CERCLA §107. The Town took the property from the previous owner for non-payment of back taxes and is protected from CERCLA liability by the exclusion for governments that involuntarily acquire property (CERCLA §101(20)(D)).

c. Enforcement or Other Actions

There are no on-going or anticipated enforcement actions on the site. There were no environmental liens on the property when the Town took ownership in August 2013.

d. Information on Liability and Defenses/Protections

The Town took ownership of the property located at 2 Littles Court by foreclosure of real property taxes from the prior owner Robert Bergeron (Little's Court Realty Trust). The Town filed the Instrument of Taking on April 5, 2012, and the final determination was issued by the land court on August 13, 2013. The Town is now the fee simple owner of the property. The Town has no relationship or affiliation with the previous owner of the property, and all disposal of hazardous materials was completed prior to the Town's ownership. The Town did not cause or contribute to

the release of any hazardous materials at the property. Nor did the Town arrange for the disposal of hazardous materials from the property or transport hazardous materials to the property. The following environmental assessments were conducted for the Town prior to their ownership of the property:

- *ASTM Phase I Environmental Site Assessment* – completed October 2007 by TRC Environmental Corporation on behalf of the Merrimack Valley Planning Commission;
- *Phase II Site Investigation* – completed August 2010 by TRC Environmental Corporation on behalf of the Merrimack Valley Planning Commission;
- *Phase II Environmental Site Assessment* – Underground Storage Tank Removal Summary Report – completed January 30, 2012 by TRC Environmental Corporation

The above investigations were conducted prior to the Town's ownership of the property and provided a thorough understanding of the contamination issues associated with the property. As described previously, the Town is protected from CERCLA liability by the exclusion provided under CERCLA §101(20)(D).

Since the Town took ownership of the property in August 2013, the property has not been put to use except for environmental response actions conducted on the Town's behalf. These response actions were conducted in order to evaluate: the risks posed by contamination on site; the appropriate measures required to minimize exposure to hazardous materials in contaminated media; and the presence of subsurface contamination which may be acting as a continuing source of contamination off-site. There are no current sources of contamination stored or used at the site. All hazardous chemicals were removed in 2003. The Town maintains a fence around the property to limit access to the property. The Town has and will continue to diligently:

- Comply with all land-use restrictions and institutions controls, of which there are none to date;
- Assist and cooperate with those performing the cleanup and provide property access;
- Comply with all information requests and administrative subpoenas that have or may be issued in connection with the property; and
- Provide all legally required notices.

5. Cleanup Authority and Oversight Structure

Environmental Response Actions will continue to be conducted under the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) by a Massachusetts Licensed Site Professional (LSP). The Massachusetts Department of Environmental Protection (MassDEP) tracks the site under release tracking number (RTN) 3-27210. The Town will retain an LSP to direct cleanup of the site in accordance with the MCP.

Current and prior environmental response actions have required access to adjacent properties. The Town negotiates access to these properties through the issuance of access agreements that clearly identify the tasks to be completed, the responsibilities of the parties involved, and the terms of access. Such access agreements include

MassDEP form BWSC-123, in accordance with the MCP. Future access agreements, as required, will continue to be negotiated consistent with past and current practice.

6. Statutory Cost Share

a. Statutory Cost Share

The 20% ($40,000) cost share match will be met through the following:

- In kind services from the Town of Merrimac Public Works Department. The Department will provide capital improvements such as assisting with the demolition of the building and the removal of materials by providing, equipment and/or labor during building demolition/cleanup, providing a water main to the site and providing clean backfill (estimated at $20 per cubic yard) from other concurrent Town improvement projects.
- In kind services from the Town of Merrimac. The Town will provide the water that will be used at the site for dust suppression during soil excavation and loading.
- In kind services from the Town of Merrimac Police Department. The Department will provide police detail and traffic management during soil loading and transportation.
- Any additional dollars necessary to make up the 20% match in excess of the above described in kind services will be met by utilizing the Town's available free cash

The 20% match will be used for eligible and allowable activities as approved by the EPA. The Town is not requesting a hardship waiver.

a. **Community Notification**

The Town of Merrimac held a meeting with the community and the Board of Selectmen on December 7, 2015 concerning its application for a cleanup grant. The community was notified through an ad in the local newspaper, an agenda item at the Board of Selectmen meeting, an e-mail to abutters, a posting at Town Hall, and a posting on the Town's website.

At the meeting, the residents expressed their full support of an application to the EPA for a cleanup grant at this site. The residents further expressed their concerns pertaining to the contamination of the site and its health implications and the safety issues concerning the abandoned building.

In addition, the residents discussed possible future uses for the site. The residents felt that a residential use would be the most appropriate for the site. The Town feels that a residential use that incorporates an affordable component would be the best use in that the Town is sorely lacking in affordable housing options for its residents. The residents at the meeting agreed.

Included as an attachment to this application is the following information concerning the December 7th Community meeting:

- A copy of the draft ABCA
- A copy of the ad in the local newspaper
- The attendance sheet from the meeting
- A summary of the meeting

A listing of the comments received and the Town's response to those comments is not included as a specific attachment because the Town did not receive any comments from the public, other than those received at the meeting. The draft ABCA and grant information was made available at Town Hall for review and public comment.

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

December 13, 2015

U.S. EPA New England
Attn: Frank Gardner
5 Post Office Square, Suite 100
Mail Code: OSRR07-3
Boston, MA 02109-3912

RE: **STATE LETTER OF ACKNOWLEDGMENT**
Town of Merrimac, Application for EPA Cleanup Grant Funds, Former Coastal Metals site, Merrimac, Parcel ID 3-1-20

Dear Mr. Gardner:

I am writing to support the cleanup grant proposal submitted by the Town of Merrimac under the Fiscal Year 2016 U.S. Department of Environmental Protection Agency (EPA) Brownfield Cleanup Grant Program. Funding from EPA will assist the Town of Merrimac in the cleanup of petroleum and hazardous material contamination at parcel 3-1-20 of the Former Coastal Metals Finishing, Inc. located at 2 Littles Court. The project will consist of building demolition and contaminant remediation to facilitate redevelopment of the property for future residential use in an area adjacent to downtown Merrimac.

In Massachusetts, state and federal agencies have developed strong partnerships and work together to ensure that parties undertaking Brownfield projects have access to available incentives. The Massachusetts Department of Environmental Protection (MassDEP), through our regional offices, provides technical support to Brownfield project proponents when regulatory issues arise. If this proposal is selected, MassDEP will work with our state and federal partners to support the Town of Merrimac to help make this project a success.

We greatly appreciate EPA's continued support of Brownfield efforts here in Massachusetts.

Sincerely,

Kerry Bowie
Brownfields Coordinator, MassDEP Commissioner's Office

ec: Carol McLeod, Finance Director, Town of Merrimac
Joanne Fagan, Brownfields Coordinator, MassDEP Northeast Regional Office
Angela Gallagher, Assistant Brownfields Coordinator, MassDEP Southeast Regional Office

December 9, 2015

Environmental Management Support, Inc.
Attn: Mr. Don West
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

RE: Coastal Metals
2 Littles Court
Merrimac, MA

Dear Mr. West:

The subject property is an abandoned industrial building located in a residential neighborhood comprised of single family, two family and multifamily residences with several commercial uses to the east of the property on West Main Street. The building is in structural failure with collapsed roof sections and failing exterior walls. The land under and around the building is contaminated with solvents. Extensive testing was performed by an environmental engineer. Additional testing which is ongoing will determine the extent and severity of the contamination as well as the impact on surrounding properties. The Town of Merrimac has taken title to the property and has been active in seeking a solution to the problems created by the above conditions.

A visioning meeting of town officials and concerned community members was to solicit opinions from community stakeholders including abutters with regard to the current status of the property and to develop a vision for its redevelopment. At the meeting the Town notified the community that they would be applying for the cleanup grant for this property.

The following is a synopsis of the input concerning existing conditions:

1. The building is a life and safety hazard based on its structural condition.
2. The site is a life and safety hazard due the on site contamination and the potential for off site contamination, the extent to be determined by ground water monitoring.
3. The Coastal Metals property has devalued surrounding properties and properties in the immediate neighborhood based on the visual impact of its dilapidated condition and perceived life/safety issues for children.
4. The fear of onsite and offsite contamination burdens surrounding properties with the stigma associated with environmental hazards.

Based existing conditions, property owners have experienced a devaluation of their property values. In the case of immediate abutters their properties have become unmarketable due to the uncertainty surrounding the environmental hazards associated with the Coastal Metals property.

Going forward:

It was the unanimous opinion of those assembled that the Town should apply for the cleanup grant from the EPA to remove the existing structure and remediate the site as quickly as possible. To this end the use of the property once remediated was discussed. Based on the size and location of the property the highest and best use for the property was determined to be multi-family housing. Low and moderate income housing was considered appropriate for the site to assist the Town in meeting its 10% affordable housing goal. A Request for Proposal would be developed to attract qualified developers.

Sincerely,

Neighbors Concerned for the Health and Safety of the Coastal Metals Site

Keith Smith	9 Woodland St	
Denise Smith	9 Woodland St	
Michael Smith	8 Vendome St	
Matt Farren	25 Grove ST	
Paul Barresi	23 Grove Street	
Chris Doucette	21 Grove St.	
Nerissa Rossi	19 1/2 Grove St	
Kristin Piracini	19 Grove St	
Brian Austin	10 Grove St	
Amanda Nantais-Austin	10 Grove St	
Jason Pechilis	22c Grove ST	

December 9, 2015

Environmental Management Support, Inc.
Attn: Mr. Don West
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

RE: Coastal Metals
2 Littles Court
Merrimac, MA

Dear Mr. West:

The subject property is an abandoned industrial building located in a residential neighborhood comprised of single family, two family and multifamily residences with several commercial uses to the east of the property on West Main Street. The building is in structural failure with collapsed roof sections and failing exterior walls. The land under and around the building is contaminated with solvents. Extensive testing was performed by an environmental engineer. Additional testing which is ongoing will determine the extent and severity of the contamination as well as the impact on surrounding properties. The Town of Merrimac has taken title to the property and has been active in seeking a solution to the problems created by the above conditions.

A visioning meeting of town officials and concerned community members was to solicit opinions from community stakeholders including abutters with regard to the current status of the property and to develop a vision for its redevelopment. At the meeting the Town notified the community that they would be applying for the cleanup grant for this property.

The following is a synopsis of the input concerning existing conditions:

1. The building is a life and safety hazard based on its structural condition.
2. The site is a life and safety hazard due the on site contamination and the potential for off site contamination, the extent to be determined by ground water monitoring.
3. The Coastal Metals property has devalued surrounding properties and properties in the immediate neighborhood based on the visual impact of its dilapidated condition and perceived life/safety issues for children.
4. The fear of onsite and offsite contamination burdens surrounding properties with the stigma associated with environmental hazards.

Based existing conditions, property owners have experienced a devaluation of their property values. In the case of immediate abutters their properties have become unmarketable due to the uncertainty surrounding the environmental hazards associated with the Coastal Metals property.

Going forward:

It was the unanimous opinion of those assembled that the Town should apply for the cleanup grant from the EPA to remove the existing structure and remediate the site as quickly as possible. To this end the use of the property once remediated was discussed. Based on the size and location of the property the highest and best use for the property was determined to be multi-family housing. Low and moderate income housing was considered appropriate for the site to assist the Town in meeting its 10% affordable housing goal. A Request for Proposal would be developed to attract qualified developers.

Sincerely,

Neighbors Concerned for the Health and Safety of the Coastal Metals Site

Julie Pasquarello - 22 Grove St. Apt. C.
Julie Pasquarello

Stuart Eggenberg 22 Grove Apt A

Sean Horgan - 38 Woodland St.

Joseph Terrazzano 26 Grove St
Beverly Terrazzano 26 Grove St Beverly Terrazzano

Henry L Cross 28 Grove St Henry L Cross

Kevin J. Sullivan 30 Grove St Kevin J. Sullivan
Woodland

Jeb Handy 3 Locust Grove Rd. Jeb Handy

David S. Keran 16 Woodland St David S. Keran

NORTH SHORE BANK

December 2015

Mr. Don West
Environmental Management Support, Inc.
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

RE: Coastal Metals

Dear Mr. West,

This letter is in support of the grant application being submitted by the Town of Merrimac regarding the former Coastal Metals Site at 2 Littles Court in Merrimac, Massachusetts. This building is fairly close to our main office and visible from the upper floors. This building has been unoccupied for over a decade and is in a serious state of decay. This area is close to the center of town and, as a result, has a negative impact on the character and development plans within the community.

The current site of the North Shore Bank underwent some testing from the Massachusetts Department of Environmental Protection several years ago because of concerns with ground water contamination from the Coastal Metals site. Thankfully, the plume of contaminants has not reached the property but we would certainly encourage any plans to remediate the issue on the Coastal Metals site. The demolition of the building and the remediation of any remaining contaminants will allow for the development of the site and improve the whole neighborhood.

North Shore Bank is committed to working with the Town of Merrimac to complete this overall project. We urge you to support this grant and provide access to the funds necessary to bring this phase of the project to completion. Thank you for your consideration.

Sincerely,

John E. Meserve
Market President

Town of Merrimac
Affordable Housing Board of Trustees

December 8, 2015

Don West
Environmental Management Support, Inc.
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

Re: Former Coastal Metal Site
2 Littles Court, Merrimac, MA

Dear Mr. West:

The Affordable Housing Board of Trustees (AHBT) for the Town of Merrimac strongly supports the efforts of the Board of Selectmen to proceed with the environmental clean-up of the former Coastal Metals site at 2 Littles Court, Merrimac. We sincerely hope the Town is successful in receiving an EPA grant to advance this work.

The AHBT applauds the actions of the Town to take possession of the property and to host visioning meetings with town officials and concerned community members to discuss its eventual development. The AHBT is encouraged that it is the consensus that the best future use of the property is to develop multi-family housing, including units designated for low and moderate income households.

This action would help achieve the goals of the affordable Housing Production Plan for the Town of Merrimac that has been approved by the State of Massachusetts. The plan specifically identifies this property as an appropriate site for development of affordable housing due to its proximity to the center of town and public transportation. The AHBT is committed to the success of this project and will make funds available to further these efforts.

We hope you will award an EPA grant to the Town of Merrimac to aid it in taking the next steps toward the development of housing serving a range of residents.

Sincerely,

Sandra Venner, Chair
Affordable Housing Board of Trustees

Merrimac Public Library
86 West Main Street
Merrimac, MA 01860
(978) 346 - 9441

Don West
Environmental Management Support, Inc
8601 Georgia Avenue, Suite 500
Silver Springs, MD 20910

December 11, 2015

Re: Coastal Metals Site, 2 Littles Court, Merrimac, MA

Dear Mr. West,

We at the Merrimac Public Library believe it is imperative that the town of Merrimac clean up the Coastal Metals site which is in a residential area but also very close to the Town Center. The Library fully supports the Town's effort to seek funding from the EPA to clean up this toxic area.

The Library will make our Meeting Room available as a public meeting space as needed. We have ample parking and the Library is a perfect venue for a public meeting and to educate the public on the dangers of soil and groundwater contamination and the important role the Department of Environmental Management plays in helping communities fund the cleanup of contaminated areas.

I am personally committed to volunteering my help in any way I can. We appreciate your support of the Town's grant application to clean up this site.

Thank you,

Martina Follansbee

Martina Follansbee
Library Director
Merrimac Public Library
86 West Main St.
Merrimac, MA 01860
mfollansbee@mvlc.org
www.merrimaclibrary.org

MERRIMACK VALLEY
MVWIB
WORKFORCE INVESTMENT BOARD

439 South Union Street, Suite 102
Lawrence, MA 01843
Phone: 978-682-7099
Fax: 978-794-1901

December 9, 2015

Harold Lloyd
Board of Selectmen
Town of Merrimac
4 School Street
Merrimac, MA

RE: Commitment to the Town of Merrimac's Application for Brownfields Cleanup Grant Funding for the Coastal Metals Site

Dear Mr. Lloyd:

The Merrimack Valley Workforce Investment Board (MVWIB) fully supports the Town of Merrimac's FY16 application to EPA for a cleanup grant for the property located at 2 Littles Court and known as Coastal Metals. In addition, the MVWIB is committed to working with the Town in its endeavor to hire locally during the course of the project.

The Town of Merrimac is a small community located in the Merrimack Valley along the Merrimack River. The former Coastal Metals site is located in the heart of Merrimac's downtown area. The cleanup and future development of the site will create jobs from start to completion, including those created through the demolition and removal of the building on the site, the cleanup phase of the project, and during the redevelopment phase of the project with the construction of the housing development. Additional jobs will be created once the project is complete in the management of the housing development. The Town has expressed that they are committed to encouraging the hiring of residents within the Merrimack Valley for these jobs. Furthermore, the Town has expressed their commitment to partnering with the Merrimack Valley Workforce Investment Board to assist the residents of the future development in taking advantage of the Board's programs, including local job training.

The MVWIB has developed an Environmental Technical Training Program for the years 2015 to 2017. The program will focus on preparing individuals with the training necessary to succeed in the field of environmental remediation. The work to be performed at the Coastal Metals site once the grant is awarded in in keeping with the goals of this program.

The MVWIB looks forward to working with the Town of Merrimac on this project and utilizing its programs to provide employment opportunities in the Merrimack Valley.

Sincerely,

Rafael Abislaiman,
Executive Director

Merrimack Valley
Planning Commission
*plan * develop * promote*

December 7, 2015

Carol McLeod, Finance Director
Town of Merrimac - Town Hall
Merrimac, MA 01860

RE: Town of Merrimac FFY16 Application for Brownfields Cleanup Grant Funding: Coastal Metal site

Dear Ms.McLeod:

On behalf of the Merrimack Valley Planning Commission (MVPC), I am writing to pledge the continued commitment of this agency's resources in providing environmental planning and economic development technical assistance for the Coastal Metals projects.

MVPC is the regional planning agency serving the 15 communities in the Merrimack Valley including the Town of Merrimac. Our office has been actively engaged over the past several years working with the Town in organizing a community-based planning and visioning process for the Coastal Metal property. Through that work and with the leadership of local officials, there is community consensus on the vision for Coast Metals site redevelopment with existing industrial building demolition and new construction for affordable, multi-family housing use.

MVPC also administers a regional Brownfields Assessment as well as Revolving Loan Fund with grant funding from EPA. Our program has supported prior assessment phase activities in preparing this property for remediation action. We recognize the importance of the Coastal Metals site to the Town's plans for central business district improvements and regional significance in promoting housing affordability and sustainable development. Given the regional priority of this project, the Coastal Metals project will be eligible for gap financing through the MVPC Brownfields Revolving Loan Fund as well as for EDA fund assistance administered by MVPC should additional funds be necessary to complete site remediation.

This is a very visible and important Brownfields project of local and regional significance. With EPA assistance, we look forward to continued work with the Town in implementing the plans and vision for this central Merrimac village neighborhood.

Sincerely,

Dennis A. DiZoglio
Executive Director

160 Main Street, Haverhill, MA 01830 phone - 978.374.0519 • fax - 978.372.4890

MASSDEVELOPMENT

99 High Street
Boston, Massachusetts
02110

Tel: 617-330-2000
800-445-8030

Fax: 617-330-2001

www.massdevelopment.com

December 16, 2015

Mr. Harold Lloyd
Chairman, Board of Selectman
Town of Merrimac
2-8 School Street
Merrimac, MA 01860

RE: Coastal Metals Site, 2 Little's Court, Merrimac, MA

Dear Mr. Lloyd:

As an administrator of the Massachusetts Brownfields Redevelopment Fund, I am pleased to offer this letter of support for the Town of Merrimac's application for a Brownfields Cleanup Grant from the U.S. Environmental Protection Agency.

In 1998, the Massachusetts Legislature created the Brownfields Redevelopment Fund to encourage development in economically distressed areas – like the Town of Merrimac - and begin transforming formerly contaminated properties into productive sites for housing, commercial development and open space. As the administrator of the Fund, MassDevelopment has made 630 individual awards to non-profit organizations, municipalities, private developers and other organizations totaling $78,694,176. However, recapitalization of our Fund remains flat while demand for remediation funding continues to grow, requiring the Agency to look to partners like the Town and the EPA to provide additional capital for environmental project work.

Since the Coastal Metal site's project inception, MassDevelopment has partnered with the Merrimac Valley Planning Commission (MVPC) to provide funds for site assessment and remediation. In 2010, the Agency awarded the Town of Merrimac a $29,350 grant to pay for a portion of its Phase II site assessment work and later awarded the Town an additional $13,200 towards the removal of an underground storage tank. Last year, the Town was awarded a $10,840 grant to conduct an assessment of PCB-containing materials in the existing structure as well as prepare a hazardous building materials specifications in preparation for the demolition of the building and future remediation of the site. These funds reflect the Agency's commitment to support the Town of Merrimac as it redevelops the property, located in the heart of Downtown, into affordable residential housing – something desperately needed locally and throughout the region.

MassDevelopment greatly values our partnerships with cities and towns. We fully support your efforts to secure these funds so that our Brownfield partnership on this project can continue and the redevelopment of this highly contaminated and blighted sight in Downtown can be remediated and redeveloped.

Sincerely,

Eleni Varitimos
Vice President
Community Development

Essex Division

INFORMAL PROBATE PUBLICATION NOTICE

Docket No. ES15P2917EA

Estate of:

Patrick A. Leary

Date of Death: July 31, 2015

To all persons interested in the above captioned estate, by Petition

Petitioner **Doreen C. Heffron of Plymouth, MA**

a Will has been admitted to informal probate.

Doreen C. Heffron of Plymouth, MA has been informally appointed as the Personal Representative of the estate to serve without surety on the bond.

The estate is being administered under informal procedure by the Personal Representative under the Massachusetts Uniform Probate Code without supervision by the Court. Inventory and accounts are not required to be filed with the Court, but interested parties are entitled to notice regarding the administration from the Personal Representative and can petition the Court in any matter relating to the estate, including distribution of assets and expenses of administration. Interested parties are entitled to petition the Court to institute formal proceedings and to obtain orders terminating or restricting the powers of Personal Representatives appointed under informal procedure. A copy of the Petition and Will, if any, can be obtained from the Petitioner.

ET - 11/18/15

Legals

NOTICE OF PUBLIC SALE: Self-storage Cube contents of the following customers containing household and other goods will be sold for cash by CubeSmart 51 South Canal St, Lawrence MA 01843 to satisfy a lien on December 3, 2015 at approx. 3:00PM at www.storagetreasures.com . Jennifer Reynoso, Nancy D Vavak, Denis Figueroa, Elsa Moure, Eloy Nunez, David Nixon, Luisa Taveras, Elza Revaud, Jacqueline Santos, Sol M Dejesus, Arianny Calderon, Michael Denis, Michael F Bouchie.

ET – 11/18, 11/25/15

COASTAL METALS GRANT MEETING

The Town of Merrimac is applying for an EPA Brownfields Cleanup grant for the Coastal Metals property, located at 2 Littles Court. The Town will be submitting a grant applications to the EPA for their review. The Town will be hosting a community meeting on **December 7th at 7:30 PM at the Merrimac Town Hall, 4 School St. Merrimac** to discuss the draft proposals for the grant application, including the draft Analyses of Brownfield Cleanup Alternatives (ABCA). The draft grant proposal, including the draft ABCA, are available for public review and comment and will be available at Town Hall. The Town will accept all comments concerning the draft proposals and draft ABCAs.

ET –11/18/15

Legals

NOTICE OF PUBLIC SALE: Self-storage Cube contents of the following customers containing household and other goods will be sold for cash by CubeSmart 15 Hale street Haverhill MA 01830 to satisfy a lien on December 3rd at approx. 2:00pm at www.storagetreasures.com

Billie Jo Rogers, Tanya Merrill, Kristi Macdonald, Nichole Feilteau, Santiago Kasmaralys, Felicia Scott, Jose Polanco, Andraya Jackson, Jerubi Romero, Jamie Gonzalez, Brain K Leavitt, Penelope Taveras, Ashley Scott.

ET – 11/18, 11/25/15

TOWN OF GROVELAND

The Zoning Board of Appeals will hold a public hearing on December 2, 2015 at 7:30 P.M. in the Main Meeting Room of Town Hall, 183 Main Street, Groveland, MA, under General Laws, Chapter 40A, as amended, for Application #2015-7 made by Craig Tedeschi, for the premises located at 16 Sylvan Street, Plat #16, Lot #097 in the R-B Residential Zone for a variance to build a garage, according to all applicable sections of the Town of Groveland Zoning Bylaws, including Section 305.

Tom Wakefield, Chairman

ET – 11/18, 11/25/15

Board of Selectmen

Selectmen's Meeting

12/07/15

I. CALL TO ORDER

Meeting is televised

PRESENT: Baumgardner, Lloyd, Connor

ABSENT:

II. APPROVE AGENDA

III. APPOINTMENT

1. 7:00PM Lake Attitash Assoc. Budget Discussion

Mark and Veronica Wolfe of Lake Attitash Assoc. Have solicited grants have been addressing the stormwater run off issues in Lake Attitash. Milfoil, blue green algae blooms have been found. They can manage weeds for about $20,000 a year. Previously the town donated $20,000, Amesbury $45,000 and the Lake Attitash Association raised $55,000. They are asking that Merrimac dedicate $16,000 annually. They are asking Amesbury for $40,000. Some of the levels could be a health hazard. They had high estimates for various type of maintenance treatments, what they are proposing is the most reasonable to them. They are looking for grants as well. Bob Sinibaldi says it equates out to 200. Per household with zero access to the lake. And he wants to know what the state is doing. Also it is Amesbury's back up water supply so he wonders why they are not footing the whole bill. LLA will be talking to Amesbury this month. LLA does not believe reducing the level would have an effect either way. Veronica feels if they let it go it will effect swimming, boating, etc. Baumgardner understands the plight but is unsure of support to spend money on the lake when few residents can use it. Sen Ives office got them on the environmental bond bill but they didn't get the funding. They have not contacted Rep Mirra as of yet. Lloyd thanks them for coming and that the board will have a discussion about it. The next step is to submit the grant this month. A decision usually comes around late spring.

2. 1905 : 7:30PM EPA Brownfields Cleanup grant for the Coastal Metals

Public hearing for the grant application. Residents present can sign a sheet for submittal with the grant. They were only about 5-6 points away from being successful to receive the grant as it is very competitive. Applying for 3 grants-$200,000 each one. To do demolition cleanup and to get a developer. Discussion ensues regarding the conditions. Lloyd concludes the hearing.

IV. CORRESPONDENCE

1. North Shore Export Forum Invite Flyer

2. 1948 : ; Receivership as a Tool to Adress the Problems Surrounding Abandoned , Neglected , and Non Cod

3. SMRP Grant

Connor congrats to Jen Penney on receiving the SMRP grant in the amount of $2350

4. G. Mello Merrimac Log November 2015

Connor questions the small number of calls logged.Connor will draft a form reflecting what the selectmen would like to see on a monthly basis.

5. Resident Email Sent to MVRTA

Nothing has changed as of yet. And we have not heard back. Connor asks if green st can be removed from the route and have the bus go through Merri village. He would like it looked into. Find out if MVRTA has met

with police chief. Draft a letter to MVRTA and request a response -Tom Fram follow up on meeting we had- ask them to come in.

6. Vendor Warrant Deadlines
7. Certificate of Good Standing and Alcohol Licenses
8. Motion to file correspndence

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Earl Baumgardner, Member
SECONDER:	Andrew Connor, Board Member
AYES:	Baumgardner, Lloyd, Connor

V. OLD BUSINESS

1. 28 School St. Bid

Sinibaldi reviewed bid for compliance. Not zoned for single family homes. Multifamily-non conforming lot- a duplex- is what he is proposing is not considered a family dwelling. Baumgardner wants clarification. Lloyd thinks he knows what the intention is. Send letter to request clarification of ultimate intended use per board of selectmen-and clarify entire sentence or have them come in. The board does not see any conditional language. McLeod will look at any time frame. 90 days from the opening date. He doesn't want it conditionally accepted because they have not made a decision.

2. MVRTA Customer Notice Bus Route 51

VI. AGENDA ITEMS

2. Motion to accept recommendation and authorize chair to sign on behalf of the board

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Earl Baumgardner, Harold Lloyd
SECONDER:	Andrew Connor, Board Member
AYES:	Baumgardner, Lloyd, Connor

3. Finance Director

Engagement letter for Danziger and Markoff for the OPEB. Meeting to look into a joint purchasing bid for insurance with other towns on Dec 15th. Anne Jim ,Jen Penney, Jenn Sforza, and Carol McLeod looking at websites and will have a recommendation in January; budgets are out to dept heads. McLeod thinks its going to be a tight budget. McLeod spoke to Pentucket about MSBA and they have made to the next step in the process. Feasibility study would be around 500000. They would pay from their own stab fund and not look to the towns. FEMA blizzard reimbursement contract 82000. Baumgardner would like to review it for next week.

The facility policy has not been approved yet. It has been noted that it has nothing to do with the town buildings. Baumgardner wants to see it spelled out. Send letter to superintendent that the policy specifies only to the junior and senior high and has no bearing on town owned property.

3. Motion to approve chair to sign acturial study with Danziger and Markoff

They were the lower bidder

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Earl Baumgardner, Member
SECONDER:	Andrew Connor, Board Member
AYES:	Baumgardner, Lloyd, Connor

4. COA PT Aide & COA PT Custodian

Mailman has not received any other interest in the COA aide position. Mailman is confident in the 2 people she is presenting. It has been manageable, until you lose someone. They have done a lot of cross training of staff. The aide position will be like a floater. Mailman received 3 applications. The position is between is 16-18 hours and the pay is 13.75 which is a high end of the range. Mailman says The work and skills required justifies the pay. Mailman would like this position to be a grade 2. Based on the required skill set. Baumgardner doesn't want to start someone in the top of the grade. Baumgardner wants to make sure that they do not create an inequity. Baumgardner wants to defer for another week. McLeod said based on the job description it should be a 2.

Mailman would like to offer 13.00 an hour for the janitor. The janitor is a grade 2.
Motion to approve application for janitor position Connor Lloyd. 2:1 Baumgardner opposed.

Baumgardner wants more time to discuss the COA aide. McLeod can work with Laura this week and bring it back next week. Mailman does not
Lloyd wants the same kind of scrutiny on every level 1 and 2 to be known on record.

5. Janitor Position

Mailman would like to offer 13.00 an hour for the janitor. The janitor is a grade 2.
Motion to approve application for janitor position Baumgardner opposed.

RESULT:	**APPROVED [2 TO 1]**
MOVER:	Andrew Connor, Board Member
SECONDER:	Harold Lloyd, Chairman
AYES:	Lloyd, Connor
NAYS:	Baumgardner

6. MVRTA Bus Route 51 Resident Concerns

7. Notification of Retirement

Acknowledged Gerry Gozycki retirement letter

8. Discussion Regarding Remote Participation and Electronic Signatures

The ZBA was approved for remote participation but not electronic signatures. The state finds it acceptable but must be accepted by the BOS.

9. Discussion Regarding Drainlayer Approval Process

Lloyd wanted to revisit this briefly. Sinibaldi indicates who signs the permits in other towns. Connor had a change of heart after the last time voted. He requested they revisit the discussion. Sinibaldi says they collect everything and as builts are 100% complete before they are sent up. Baumgardner thought that this was a new law that the BOS was the issuing authority. McLeod will look into it.

10. Liquor License Renewal

Application fee should be collected at time of renewal notice moving forward.
Motion to approve licenses

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Andrew Connor, Board Member
SECONDER:	Earl Baumgardner, Member
AYES:	Baumgardner, Lloyd, Connor

VII. EXECUTIVE SESSION

1. Personnel Finance Director's Contract

Hold both until next week

2. Exec Session Contract Neg

VIII. ADJOURN

1. Motion to adjourn at 9:50PM

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Andrew Connor, Board Member
SECONDER:	Earl Baumgardner, Member
AYES:	Baumgardner, Lloyd, Connor

12/14/2015

Coastal Metals Grant Meeting

The Town of Merrimac is applying for an EPA Brownfields Cleanup grant for the Coastal Metals property, located at 2 Littles Court. The Town will be submitting a grant applications to the EPA for their review. The Town will be hosting a community meeting on **December 7th at 7:30 PM at the Merrimac Town Hall, 4 School St. Merrimac** to discuss the draft proposals for the grant application, including the draft Analyses of Brownfield Cleanup Alternatives (ABCA). The draft grant proposal, including the draft ABCA, are available for public review and comment and will be available at Town Hall. The Town will accept all comments concerning the draft proposals and draft ABCAs.

Town of Merrimac Attendance Sheet
Public Hearing - Intent to Apply for EPA Brownfilds Clean up Grants
Coastal Metal Site - 3 Grants
December 7, 2015, 7:30 PM
4 School St.
Merrimac, MA 01860

Name	Address
STUART EGENBERG 617 5109976	22 A GROVE ST STUARTMEGENBERG9@gmail.com
Pat Williams-Driscoll	3A Littles Ct. Merrimac. pdriscoll13@comcast.net
Mike Driscoll	3A Littles Ct. Merrimac
Amy Murphy	29 Hadley Rd Merrimac MA
Sandra Vendrea	55 School St. Merrimac.
[illegible]	12 Heston Rd. Merrimac
ROBERT SINIBALDI	2 FARRINGTON FIELD MERRIMAC
Andrew Conn	75 W. MAIN ST. MERRIMAC
Earl Baumgardner	18 Merrimac Street
HAROLD LLOYD	12 NICHOLS ST, MERRIMAC
Joyce Perelli	19 west main unit 15

DRAFT ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES REPORT

2 LITTLES COURT
PARCEL 3-1-20
MERRIMAC, MASSACHUSETTS

MASSDEP RTN 3-27210

Prepared for:

Town of Merrimac
Merrimac Town Hall
2-8 School Street
Merrimac, Massachusetts 01860

Prepared by:

TRC Environmental Corporation
Wannalancit Mills
650 Suffolk Street
Lowell, Massachusetts 01854
(978) 970-5600

December 2015

TABLE OF CONTENTS

1.0 INTRODUCTION

This Draft Analysis of Brownfields Cleanup Alternatives (ABCA) was prepared by TRC Environmental Corporation (TRC) on behalf of the Town of Merrimac (the "Town") for the property located at 2 Littles Court (Parcel 3-1-20), located in Merrimac, Massachusetts (the "Site"). This Draft ABCA was prepared to fulfill the requirements of a United States Environmental Protection Agency (EPA) Brownfields Cleanup Grant application by the Town. TRC prepared an Interim Phase II Comprehensive Site Assessment (CSA) report, dated April 2014. The results of the CSA report provided a basis for preparation of this Draft ABCA. This Draft ABCA has been presented at public meeting for review and comment on December 7, 2015.

1.1 Purpose

The purpose of this Draft ABCA is to present a preliminary evaluation of practicable remedial alternatives for remediating the Site, given the assessment information available to date.

This document is intended to satisfy EPA's threshold criteria requirement for a Draft ABCA under the EPA Brownfields Cleanup Grant Program.

1.2 Scope of Work

This document presents a preliminary evaluation of feasible remedial alternatives to address metals-impacted soil and chlorinated solvent-impacted groundwater at the Site. TRC utilized the requirements for a Final ABCA, which are detailed on the *Brownfields Cleanup Grant Major Tasks* checklist for Region 1 dated June 2011, to set the general format of this scope of work. These requirements include the following:

- Information pertaining to the Site background and the potential threats the Site may pose to public health and/or the environment;
- Documentation that the situation at the Site meets the need for an environmental response action;
- Identification of the objectives of the environmental response action, including an analysis of potential cleanup alternatives, enforcement activities, and projected costs; and
- Identification of the most feasible remedial action, with an explanation of the rationale for its selection.

2.0 BACKGROUND

2.1 Site Description

The Former Coastal Metals property is located at 2 Littles Court in Merrimac, Massachusetts. The property is currently divided in three Parcels (Parcel 3-1-7, 3-1-8, and 3-1-20). This Draft ABCA applies to the easternmost parcel of the 2 Littles Court property, parcel 3-1-20 (the "Site"). The latitude and longitude of Parcel 3-1-20 is 42° 49' 59.78" North and 71° 0' 14.96" West, and the Universal Transverse Mercator (UTM) coordinates are 4,744,248 meters Northing and 336,201 meters Easting in Zone 19. The location of the Former Coastal Metals Site is depicted in Figure 1.

The Site is an approximate 0.51-acre, irregularly-shaped parcel of land located in Merrimac, Massachusetts. The Site is located on a narrow roadway off Main Street and is currently vacant with a building formerly used as a metals finishing facility. The building is in disrepair, with portions of the roof missing and areas of the building containing refuse and debris. The floor of the site building is constructed of concrete with trench drains to collect spills. Access to the Site is restricted by a perimeter fence. Site features are shown in Figure 2.

The Site is located in Merrimac's downtown and is surrounded on all sides by residential properties. The Site is located approximately 1,000 feet west of Cobbler Brook, approximately 1,000 feet southwest of Stevens Pond, and approximately 0.8-mile north of the Merrimack River. The topography in the immediate vicinity of the Site slopes to the east towards Cobbler Brook. Cobbler Brook flows southerly into the Merrimack River.

2.2 Potential Receptors

Based on Site reconnaissance, no wetlands are on or abutting the Site. According to data maintained on the Massachusetts Geographic Information System website (http://www.mass.gov/mgis/), No public drinking water supplies [i.e., Zone II, Interim Well Head Protection Areas (IWPAs) or Potentially Productive Aquifers (PPAs)] are located within a one mile radius of the Site. According to the Town, there are no private drinking water wells within 500 feet of the Site. Therefore, the Massachusetts Contingency Plan (MCP) Method 1 GW-1 cleanup standards are not applicable. The GW-2 standards apply to results obtained within 30 feet of an occupied structure, and the GW-3 standards apply to all groundwater in Massachusetts.

The Site is primarily covered by the existing structure with grass and asphalt pavement. The Site is not currently occupied and access to Site soils is restricted by physical means (i.e., a fence). The Site is located adjacent to other residential structures; therefore, the MCP Method S-1 soil standards would be appropriate to evaluate unrestricted future use of the Site. One redevelopment option the Town is considering is for mixed-use, which would include occupied structures. Therefore, the applicable criteria for data collected at this Site would be MCP Method 1 S-1 for soil and GW-2 and GW-3 cleanup standards for groundwater.

The primary potential receptors include current and future residents at adjacent residential properties and future residents of the Site following redevelopment.

2.3 Summary of Response Actions to Date

In November 1985 Enpro Services, Inc. (Enpro) completed a letter report summarizing the findings of a subsurface investigation at the Site. Three monitoring wells were installed and sampled for RCRA-8 metals and volatile organic compounds (VOCs). Based on the results of laboratory analysis, Enpro concluded that significant groundwater contamination did not exist; however, the Enpro report indicates that a 4,000 gallon No.2 fuel oil underground storage tank (UST) was present on the Site at that time. According to the report, plans were in place to empty the tank and fill it with inert material. Additionally, the report states that a groundwater sample collected downgradient of the reported UST did not indicate leaking. No record of removal or tank closure was provided.

In 1990, Enpro completed a Hazardous Material Site Investigation at the request of a potential purchaser. As a part of this investigation, three monitoring wells were installed at the Site to evaluate whether historical waste disposal practices had impacted Site groundwater. Analytical results indicated the presence of trichloroethylene (TCE) and dichloroethylene (DCE) in groundwater. TCE was reported at 81 micrograms per liter (µg/l) from one water sample collected from an on-site groundwater well. At the time of the Enpro assessment, no state regulatory level was promulgated for concentrations of TCE in groundwater, and Enpro did not recommend further action. However, a concentration of 81 µg/l of TCE in groundwater exceeds the current Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) Reportable Concentration for category GW-2 groundwater (RCGW-2).

In February 2003, the Merrimac Fire Department notified EPA that the Site building was not being maintained and was without heat, power or water for fire suppression. EPA representatives and contractors subsequently conducted a preliminary investigation at the Site. EPA found that although the plating lines had been inactive for over 12 months, the plating baths, the water treatment system and the sludge dewatering system still contained hazardous waste. Approximately 110 plating baths in three plating areas which included precious metals, chromate plating and zinc plating, were identified at the facility during this investigation. A chemical storage area containing various chemicals stored in fiber glass drums, metal drums, paper sacks and small containers were observed during the investigations. Additionally, several hundred pounds of cyanide were stored in a locked cage inside the facility building.

From March through August 2003, EPA conducted a response action at the Site. Solutions and sludge present in the plating baths, drums and other containers of hazardous material were consolidated, transported and disposed of using appropriate environmental controls. Several thousand gallons of corrosive liquids and several thousand pounds of chemical solids were removed from the Site. Much of the waste material contained chromium and nickel or cyanide. According to EPA's report titled Removal Program After Action Report/or the Coastal Metal Finishing, Inc. Site, Merrimac, Essex County, Massachusetts, 12 March 2003 through 28 August 2003, all hazardous waste was disposed of by EPA-approved methods and in EPA-approved facilities.

TRC completed an American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment at the Site in 2007 on behalf of MVPC and the Town. The Phase I was conducted as part of MVPC's Brownfields Assessment program and identified two significant findings: the historical industrial uses of the Site as a metals plating operation and a brass foundry, and the potential presence of a fuel oil UST on Site. Several potential sources of contamination were identified and include: the cyanide storage area, the hazardous waste storage area, drum storage areas, electroplating vats, the racking and packing area, the electroplating chemical storage area, pad-mounted transformers, plating vats, the potential UST, floor trench drains, the precious metals plating area, the on-site water treatment system, and loading dock areas.

In August 2009, Hager Geoscience, Inc. (HGI) and TRC performed a ground penetrating radar (GPR) survey to evaluate the bedrock profile beneath the Site and to investigate the presence of the reported UST. The survey identified a geophysical anomaly potentially indicative of a UST along the southeastern side of the Site.

TRC collected 40 soil samples (from 20 boring locations) and six groundwater samples from the Site as part of the May 2010 Phase II Environmental Site Assessment that was conducted for the Town as part of MVPC's Brownfields Assessment program. Based on comparison of soil analytical results to MCP regulatory criteria, antimony, arsenic, cadmium, total chromium, lead, nickel, zinc, benzo(a)pyrene, C5-C8 aliphatic hydrocarbons, C9-C10 aromatic hydrocarbons, and total cyanide are present in Site soil at concentrations in excess of potentially applicable MCP Method 1 soil cleanup criteria, and copper is present in excess of the reportable concentration for category S-l soil (there is no Method 1 standard for copper). Based on comparison of groundwater analytical results to MCP regulatory criteria, TCE exceeded its potentially applicable Method 1 GW-2 standard in two monitoring wells. Cadmium, nickel, and zinc exceeded applicable Method 1 GW-3 criteria in both filtered (dissolved) and unfiltered (total) samples in select locations. Total cyanide exceeded its Method 1 GW-3 standard in two samples, of which one sample contained physiologically available cyanide (PAC) in excess of the Method 1 GW-3 standard. Sample collection locations are shown in Figure C-1. The highest contaminant concentrations were generally found in the northeastern portion of the Site, near historical areas of production and chemical use.

TRC's 2010 Phase II Site investigation also included a hazardous building materials survey that identified and quantified visible asbestos, lead based paint, and household hazardous items and provided an estimate to abate and demolish the Site building.

From December 13 to 14, 2011 TRC conducted activities to decommission the previously identified fuel oil UST on Site. The UST removal was conducted on behalf of MVPC and the Town. The tank, its contents, and associated piping were sent off Site for proper disposal and/or recycling. The capacity of the UST was greater than anticipated – 10,000 gallons versus the originally reported 4,000 gallons.

After removal of the UST, TRC collected discrete soil screening samples from the four sidewalls and the base of the excavation, as well as from beneath the vent pipe located adjacent to the Site

building, and screened the samples for the presence of VOCs using a photoionization detector (PID). TRC collected four soil samples from the excavation sidewalls (TANK-SW, TANK-NW, TANK-NE, and TANK-SE) and two soil samples from the bottom (TANKBASE-1 and TANKBASE-2) of the excavation for laboratory analysis. Also, because groundwater was encountered during UST removal activities, one grab groundwater sample was collected (TANKWATER-1). Samples were transported to Con-Test Analytical Laboratory of East Longmeadow, Massachusetts. Soil samples were submitted for analysis of volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH). The water sample TANKWATER-1 was submitted for analysis of VOCs, VPH, and EPH.

No VPH or EPH constituents were detected above MCP RCs or Method 1 cleanup criteria in the soil and groundwater post-excavation samples collected as part of this investigation. Compounds identified at concentrations in excess of applicable RCs included arsenic, cadmium, total chromium, and nickel in soil and TCE in groundwater, consistent with the findings of TRC's 2010 investigation on Site.

During previous investigations, contaminant concentrations in excess of comparison criteria were noted at locations near the Site boundary. Therefore, in order to evaluate the horizontal extent of groundwater contamination, TRC installed additional monitoring wells on-Site and on neighboring properties in December 2013. Five of these off-Site wells were placed within approximately 15 feet of occupied buildings in order to evaluate the potential for migration of organic vapors from groundwater to indoor air. One of the on-site wells was installed in bedrock to evaluate TCE in bedrock. A complete round of groundwater sampling from new and previous monitoring wells was also completed as part of Phase II CSA activities.

TRC collected eight soil samples during the 2013 investigation event from boring B-21 through B-24. Two samples were collected from each boring at 0-3 foot depth as well as a sample from greater than 3 feet. Several metals including arsenic, cadmium, chromium, lead, and nickel where detected above MassDEP MCP Method 1 standards in soil samples collected during TRC's 2013 investigation.

Groundwater samples collected from previously installed as well as newly installed monitoring wells indicated detection of chlorinated VOCs (CVOCs) above MCP Method 1 standards (GW-2) including cis-1,2-dichloroethylene, TCE, PCE, and vinyl chloride in monitoring both on and off-site. Several metals (total and dissolved) were also detected above MCP Method 1 standards (GW-3) including cadmium, lead, nickel, and zinc.

2.4 Conceptual Site Model

The Site, formally Coastal Metals Finishing, Inc., operated as a plating business on the property between 1970 and 2002, when operations ceased. Activities at the facility included precious metal plating, zinc plating, and chromate plating. Prior historical uses of the Site included a carriage factory and a brass foundry in the early 20th century. The release of metals and TCE to the Site soil and groundwater has likely occurred due to the former metals plating processes.

Multiple metals (i.e., arsenic, cadmium, lead, nickel) has been identified above MCP Method 1 standards throughout Site soils at depths ranging from surface to eight feet below grade. Groundwater samples collected have also revealed detections above MCP Method 1 standards of various metals (both total and dissolved) including cadmium, chromium, copper, lead, nickel, and zinc (only cadmium, nickel, and zinc have been detected in dissolved phase) both throughout the on-site wells as well as several offsite wells. Detections of TCE, cis-1,2-dichloroethylene, tetrachloroethylene (PCE), and vinyl chloride have also been detected above MCP Method 1 standards in both on-site and offsite monitoring wells. Both cyanide and physiologically available cyanide (PAC; MW-7 in 2010 only) have been detected above MCP Method 1 standards in on-site monitoring well locations.

VOCs present in groundwater could potentially volatilize into soil vapor and subsequently migrate to indoor air at current adjacent residences or future residences on the Site.

3.0 ALTERNATIVES ANALYSIS

3.1 Remedial Action Objectives and Cleanup Goals

The Town anticipates redeveloping the Site for multi-family residential. The objective of remediation at the Site would be to achieve Site closure under the MCP by demonstrating that a condition of No Significant Risk has been achieved. To achieve a condition of No Significant Risk and a subsequent Response Action Outcome (RAO) for site closure, potential exposures to metals in soil and groundwater and VOCs in groundwater and, potentially, soil gas and/or indoor may need to be eliminated or controlled by MCP Response Actions. Further testing activities are anticipated at the Site to refine cleanup volumes before implementation.

3.2 Identification of Remedial Alternatives

TRC performed a preliminary evaluation of several potential alternatives for addressing the petroleum-impacted soil at the Site. From that evaluation, TRC identified a limited number of practicable remedial alternatives that could be implemented at the Site based on available Site data and TRC experience. The No Action alternative was also included as part of the evaluation to establish a baseline for conducting remedial actions at the Site. The remedial alternatives identified for consideration under this alternatives analysis include:

1. No Action;
2. Soil Excavation to 15 feet, Backfill, Off-Site Soil Disposal/Recycling and Groundwater Remediation using Accelerated Anaerobic Biodegradation;
3. Soil Excavation to 3 feet, Backfill, and Implementation of an Activity and Use Limitation (AUL) and Groundwater Remediation using Accelerated Anaerobic Biodegradation.
4. Soil Excavation to 3 feet, Backfill, and Implementation of an AUL and Monitoring Natural Attenuation (MNA) in groundwater.

3.3 Evaluation and Comparison of Remedial Alternatives

Each remedial alternative identified above was comparatively evaluated based on the following criteria: effectiveness, implementability, resilience to the effects of climate change, green principles, and cost. The preliminary cost estimates presented in this document are considered order-of-magnitude estimates that were prepared solely for the relative comparison of the identified alternatives, based on the Site information available to date, and in no circumstance should they be construed as design-level estimates. A description of each alternative and the results of the comparative analysis are presented in the following subsections.

3.3.1 Remedial Alternative #1: No Action

The No Action alternative involves the performance of no remedial actions. Although low cost and relatively easy to implement, the No Action alternative is not expected to achieve a condition of No Significant Risk required by the MCP and would not be effective in preventing potential exposures to Site contaminants. Therefore, the No Action alternative will not meet the remedial action objectives and cleanup.

3.3.2 Remedial Alternative #2: Soil Excavation, Backfill, Off-Site Soil Disposal/Recycling; and Groundwater Remediation using Accelerated Anaerobic Biodegradation

Site Building Abatement and Demolition

This alternative involves abatement of asbestos containing material and other regulated waste as well as demolition of the Site building in order to facilitate environmental remediation activities.

Soils

Remedial Alternative #2 consists of removing all metals-impacted soil in spot excavations across the Site to a depth of approximately 15 feet (or to bedrock, whichever is first). An estimated 4,200 tons of metals contaminated soil will be removed and recycled/disposed off-Site prior to redevelopment, and the excavated areas will be backfilled with clean soil. New Building foundations and/or utility corridors could be then installed and/or parking areas could be constructed, if desired for Site redevelopment without exposure to contaminated soil.

Groundwater

The complete dechlorination of chlorinated VOCs requires the synergistic effects of a number of different microorganisms in a healthy anaerobic community. An ample supply of electron donors (i.e. a carbon source) is also required to sustain the growth of dechlorinating microorganisms, as well as the growth of organisms that supply the dechlorinating organisms with essential nutrients.

Conditions at the Site have been preliminarily evaluated and appear conducive to natural attenuation. Additives can be utilized to enhance this process, and could consist of an electron donor, microorganisms, and/or substances that would induce anaerobic conditions, which would be injected through a network of injection wells. A number of studies have shown that simple substrates such as lactate (an electron donor) can support a complex community of bacteria. Dehalococcoides bacteria can be added to boost the microbial population, if necessary. Proprietary products are also available for use as additives.

Anaerobic Biodegradation would be successful at treating residual concentrations in the downgradient plume areas, and on-site source areas based on available date, but implementation in the source zone may not be successful if significantly high concentrations are discovered. Treatability testing is recommended.

Following implementation, several rounds of monitoring must be conducted on a periodic basis to ensure that conditions remain favorable, and that concentrations are being reduced.

This alternative would be very effective at reducing risk levels at the Site, but would be moderately difficult to implement, when compared to the remaining alternatives. The anticipated effects of climate change should not impact the implementability of this alternative. This

alternative may be oversized, given the targeted end-use of the property (multi-family residential). Hence the remedial end points may be achievable while generating far less soil for landfilling and using fewer fossil fuels for soil excavation, transportation, and disposal.

The estimated cost for implementing Remedial Alternative #2 is approximately $1,000,000.

3.3.3 Remedial Alternative #3: Soil Excavation to 3 feet, Backfill, Implementation of an Activity and Use Limitation (AUL); and Groundwater Remediation using Accelerated Anaerobic Biodegradation

Site Building Abatement and Demolition

This alternative involves abatement of asbestos containing material and other regulated waste as well as demolition of the Site building in order to facilitate environmental remediation activities.

Soils

Remedial Alternative #3 consists of removing accessible Metals-impacted surface soil only to a depth of three feet below grade in spot excavations across the Site, prior to redevelopment of the Site. An estimated 900 tons of metals-contaminated soil will be removed and recycled/disposed off-Site. The excavated areas would be backfilled with clean soil. If desired, surface areas could be covered with either asphalt or concrete for parking and/or building foundations. Implementation of an AUL may be necessary to limit the threat of exposure to future residents or utility workers.

Groundwater

The same remedial process would apply to groundwater as is described in Remedial Alternative #1 above.

Assuming the selected redevelopment use for the property is as multi-family residential an engineered vapor barrier and/or institutional controls may be necessary to prevent exposure to chlorinated solvent vapors from groundwater beneath the Site. In comparison to other alternatives, this alternative could be implemented moderately easily although its effectiveness would be less than Alternative #2 because subsurface soil contamination (i.e., below three feet) would remain. The anticipated effects of climate change should not impact the implementability of this alternative. Although Alternative #2 is more effective in terms of the completeness achieved contaminant removal, far less material is generated for off-Site disposal or recycling in Alternative #3, likewise fossil fuel consumption and greenhouse gas (GHG) emissions, while still facilitating the targeted end-use of the property (multi-family residential).

The estimated cost for implementing Remedial Alternative #3 is approximately $725,000.

3.3.4 Remedial Alternative #4: Soil Excavation to 3 feet, Backfill, Implementation of an AUL; and Monitoring Natural Attenuation (MNA) in groundwater

Site Building Abatement and Demolition

This alternative involves abatement of asbestos containing material and other regulated waste as well as demolition of the Site building in order to facilitate environmental remediation activities.

Soils

Remedial Alternative #4 consists of removing accessible Metals-impacted surface soil only to a depth of three feet below grade in spot excavations across the Site, prior to redevelopment of the Site. An estimated 900 tons of metals-contaminated soil will be removed and recycled/disposed off-Site. The excavated areas would be backfilled with clean soil. If desired, surface areas could be covered with either asphalt or concrete for parking and/or building foundations. Implementation of an AUL may be necessary to limit the threat of exposure to future residents or utility workers.

Groundwater

Natural attenuation is the cumulative result of dilution by natural groundwater flow and the biodegradation by naturally-occurring microorganisms (discussed above) to degrade chlorinated solvents present in the subsurface. Conditions at the Site have been preliminarily evaluated and appear conducive to natural attenuation, but further testing will be required. Monitoring must be conducted on a periodic basis to ensure that conditions remain favorable, and that concentrations are being reduced. Monitoring would be very similar to the procedures that would be required following injection of amendments, as discussed in the previous alternative.

Assuming the selected redevelopment use for the property is as multi-family residential an engineered vapor barrier and/or institutional controls may be necessary to prevent exposure to petroleum vapors from soil remaining below three feet deep. The installation of sub-slab depressurization systems in four adjacent residences is being considered for this alternative. In comparison to other alternatives, this alternative could be implemented relatively easily although its effectiveness would be less than Alternative #2 and #3 because subsurface contamination (i.e., below three feet) would remain and elevated concentrations of CVOCs would remain in groundwater. The anticipated effects of climate change should not impact the implementability of this alternative. Although Alternative #2 is more effective in terms of the completeness achieved contaminant removal, far less material is generated for off-Site disposal or recycling in Alternative #4, likewise fossil fuel consumption and greenhouse gas (GHG) emissions, while still facilitating the targeted end-use of the property (multi-family residential). Alternatives #3 and #4 would have a similar carbon footprint.

The estimated cost for implementing Remedial Alternative #4 is approximately $400,000.

3.4 Selection of Remedial Alternative

The No Action Alternative (Remedial Alternative #1) was included in this analysis for comparative purposes only and is not a feasible alternative, since it does not meet the remedial action objectives. Remedial Alternatives #2, #3, and #4 were evaluated to address metals-impacted soil at the Site and deemed to have different degrees of effectives in terms of the ability to achieve a level of No Significant Risk. Remedial Alternatives #2 and #3 were evaluated to address CVOCs in groundwater. Remedial Alternative #4 was determined to be effective and moderately easy to implement.

The need for vapor barriers and/or sub-slab depressurization systems at adjacent potentially impacted properties will be further evaluated during future assessment activities.

OMB Number: 4040-0004
Expiration Date: 8/31/2016

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 12/17/2015

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Town of Merrimac

* b. Employer/Taxpayer Identification Number (EIN/TIN): 046001219

* c. Organizational DUNS: 0117867580000

d. Address:

* Street1: 4 School Street
Street2:
* City: Merrimac
County/Parish:
* State: MA: Massachusetts
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 01860-1915

e. Organizational Unit:

Department Name: Finance Department

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:
* First Name: Carol
Middle Name:
* Last Name: McLeod
Suffix:

Title: Finance Director

Organizational Affiliation:

* Telephone Number: 978-346-0524
Fax Number: 978-346-8824

* Email: cmcleod@townofmerrimac.com

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.818

CFDA Title:

Brownfields Assessment and Cleanup Cooperative Agreements

*** 12. Funding Opportunity Number:**

EPA-OSWER-OBLR-15-06

* Title:

FY16 Guidelines for Brownfields Cleanup Grants

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

The Town of Merrimac is requesting Cleanup funding for the Coastal Metals site (3-1-20), an abandoned plating facility, located at 2 Littles Court in Merrimac, Massachusetts.

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: MA-003 * b. Program/Project: MA-003

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 06/01/2016 * b. End Date: 06/01/2019

18. Estimated Funding ($):

* a. Federal	200,000.00
* b. Applicant	40,000.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	240,000.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name: Carol

Middle Name:

* Last Name: McLeod

Suffix:

* Title: Finance Director

* Telephone Number: 978-346-0524 Fax Number: 978-346-8824

* Email: cmcleod@townofmerrimac.com

* Signature of Authorized Representative: Carol McLeod * Date Signed: 12/17/2015